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FOOD STANDARDS[1]

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THE approach to the maintaining of food standards, both in the commercial field and in the hospital, is fundamentally the same. Experiences gained in the maintaining of food standards suited to the needs of a commercial cafeteria and tea room can be applied in many instances to the hospital type of service.

On the surface, your problems and mine appear quite unrelated, for you deal with the sick while my guests are well. Your guests are inactive and mine are seeking nourishment in the course of a working day. Your customers are patients who have been sent to the hospital by their physicians and our customers are guests of the restaurant of their choice.

There are two factors influencing food service that we cannot expect to have alike in hospital and restaurant: namely, the atmosphere and surroundings of a hospital are totally different from that of a restaurant and the method of service naturally cannot be compared. Yet service plays a most important part in presenting good food. Both your and my guests enjoy attractive china, colored linen, polished silver and novel glassware. The average restaurant makes a special effort to have unusual containers in which to serve their food, and the hospital likewise will find it advantageous to avoid the ordinary institutional ware. Attractive equipment today is as inexpensive and durable as the old style heavy hotel ware.

But aside from these points there are six other factors influencing both hospital and restaurant food standards. Both organizations are equally concerned with food and labor costs, food purchasing, menu planning, food preparation and individual appetites, and all these points have a definite bearing on food standards.

With regard to labor costs, we argue that if it takes well-trained and

[1] Presented before the Michigan Dietetic Association, Grand Rapids, Michigan, May 29, 1936.

thus well-paid executives to oversee our food preparation, it will take intelligent and well-paid employees to carry out the executive instructions. Standards of food and service cannot be maintained when your organization does not have the money to employ the right type of personnel. To follow recipes and formulas and carry out the daily routine efficiently, all of which result in standardization, we must have sufficient well-paid help. The treatment of employees is also a weighty factor. If they deserve to be in your employ they deserve to be treated with a human interest. If you appear interested in your employees, they will respond with greater interest in their jobs, thus helping to keep labor and food costs down and to maintain a better and more constant food standard.

Food purchasing is perhaps the very basis of food standardizing. If your buying is done through a purchasing agent, instruct him with definite requirements on every article ordered. Let your agent know that you have a standard and refuse to accept anything that you think is not up to the measurements that will give the desired result. If you do your own buying, know exactly the specification of the product that you want and sell your order to the salesman—don't let him sell you! It is well to have itemized for your own reference, top or peak prices that you can afford to pay for all food products in order to maintain a desired food percentage, and when prices go above these levels discontinue these items from your menus.

Another point in buying which I think deserves consideration is the treatment of the salesman. Each is a specialist in his line and when I find one that is honest with me, I place confidence in him. These men know market conditions in their respective industries. Many of us too often refuse to see salesmen, believing that they take too much time, but have you ever realized that every salesman has a wealth of ideas which have been passed on to him from daily and hourly contacts with other people in our own line of work? He cannot help but gather information that may help us; new items are always being added to his line—new sizes of canned goods, new flavors, new equipment, new ideas and new recipes. We cannot afford to overlook anything new, and the salesman that we refuse to see may have the most to offer us. For those who buy through a purchasing department, I think it advisable to have the opportunity of interviewing the salesman at least every three months, in order to become familiar with his line. Your purchasing agent, after all, is only the buyer. You as the consumer are more conscious of the factors that affect the use of various items; a suggestion

from the salesman to you rather than to the purchasing agent may bring new considerations to light. He may suggest means whereby you might be able to reduce costs or give more variety to your menu. I believe in bringing together the person who is doing the selling and the person who is going to see the article in use. Let the salesman who sells coffee talk to your coffee maker; let your meat distributor talk to your chef; let your butter and egg dealer talk to your baker; and by all means have your dietitians and supervisors well-informed on the needs of your organization and on the market conditions as represented by your dealers. The closer you can bring the two points of buying and selling, the closer you will come to maintaining an established food standard.

And now we come to the question of menu planning. Here your problem and mine can be quite different, for the factor of special diets alone greatly differentiates the hospital and restaurant services. However, even the restaurant has to consider special diets since guests may demand substitutions either because of appetite whims or as health measures. Restaurants today make a special effort to grant their guests every request, no matter how ridiculous, for it is this individual attention which creates good will, and the satisfied customer returns. The hospital can cater likewise to whims of appetite as well as special diets, with the same purpose in mind—to insure good will and thus a satisfied patient.

With so many dainty dishes possible these days, meals for the sick can be transformed from tedious moments to bright spots in the day. Because right feeding of the sick makes such an incredible difference in the speed and completeness of recovery, too much thought cannot be given to menu planning.

Experience of food authorities has shown that scientific menu planning is based on ten fundamental principles: namely, food supply, organization, clientele, cost, balance, variety, season, locality, left-overs, and occasion. In planning our menus, we have learned that they should not be too elaborate. It is well to limit the number of items as much as possible, for this leads to fresher foods; there is less preparation expense and fewer left-overs, which means a lower food cost. But the main advantage is that more time and attention can be given a few items.

We must have balance in our menus—items that appeal to both men and women, popular foods, and combinations that are dietetically correct. We must not forget the children—catering to children is good business and the restaurant makes an effort to satisfy their least desires. Special printed menus in color, with attractive nursery rhyme names and junior

serving portions all help to attract the children who, in turn, seldom forget the name of the restaurant where they have been so well cared for. In just the same way the hospital can cater to the child patient.

In planning our menus we cannot overlook attractiveness, the importance of eye appeal. Color in food is just as important as it is in inedible art, for a pleasing plate combination will tempt many a jaded appetite. Attractive relishes, combinations or accompaniments of certain items, may greatly enhance the eye appeal. Garnishes expertly used give a finished look to any plate combination; they are as important to food as accessories are to clothes. They may add a color note, aid in design or simply give that final touch that makes an artistic whole. But there is another important purpose of garnishes and that is to enhance the flavor of foods. I am not thinking of the ordinary garnishes such as apple sauce with fresh ham or mint jelly with lamb, but of garnishes such as Youngberry preserves, rose-apple stuffed with burnt almond slaw, white currant and red raspberry jelly, crème de menthe stuffed apricots; or for an appetizer, iced cranberry juice cocktail or Royal Anne cherries in fresh lime juice, grapefruit sections in maple syrup, or baked fresh rhubarb and black cherry cup. Have you ever tried garnishing your desserts with chopped pistachio nuts on vanilla blanc mange or a lemon slice and sprig of fresh mint on lemon chiffon pie, or crushed mint candy on chocolate Bavarian cream, or seeded halves of Tokay grapes on orange tarts? It is the unusual and the pleasing that your patient and my guest do not expect that determines our standard of attractiveness.

In menu planning we cannot overlook the serving of seasonable dishes. It is an excellent policy to be known for serving special dishes in season; for example, in the summer, well-chilled and deliciously ripened melons, and in the fall, pumpkin pie with honey and whipped cream.

In the planning of the perfect meal which reflects good food standards there is art as well as science; simplicity in design and harmonious blending of colors and texture must be considered. Nevertheless no menu is so good that it may be repeated day after day. In both the hospital and the restaurant where we find good food standards, we also note that variety is the keynote, and anticipation a fine appetizer.

It might be well to consider individual appetite as a factor in menu planning, before considering food preparation. Appetite is dependent upon such factors as activity, locality, weather, health, time of the day, and state of the emotions, all have a part to play in individual appetites and thus both the hospital and the restaurant have a responsibility in catering to these factors. At present we are finding certain combinations

particularly attractive to the majority of appetites, and it is interesting to note that some of these combinations are almost fads. A few with which we have had unusual success are: vegetable main dishes, such as baked vegetable loaf with cheese rarebit sauce; baked spinach ring filled with creamed fresh mushrooms; and a rice and pecan croquette.

Sea-food is another item that our guests seem to be enjoying more and more each day. Not only on Friday but every week day as well we offer sea-food on our menu. I can think of no better item on which to base a good food standard than the reputation for serving fresh, well-cooked and seasonable sea-foods.

The salad and sandwich luncheons are each day becoming more popular and the crisp green salad bowl seems to have taken our guests by storm. It is a profitable dish and most attractive for warm summer days. Combinations such as grated raw vegetables are popular for sandwich or salad mixtures. Chopped raw vegetables added to a well-seasoned thin aspic served ice cold in chilled cocktail glasses is a good appetizer, and thin strips of crisp young carrots, cucumber and turnips, make a delicious relish.

Now we come to a consideration of food preparation. In America we have traditions in cookery that have been handed down from generation to generation, but gradually the art of cooking takes on new features and the hospitals and restaurants must keep step. Everything the world has to offer for food is at our doors. From the past we bring the old tried ways of cooking, and combine these with the best modern ways. John Ruskin defined cooking as:

> the knowledge of all herbs and fruits and balms and spices, and all that is healing and sweet in fields and groves and savory in meats. It means carefulness and inventiveness and willingness and readiness of appliance. It means the economy of your grandmothers and the science of the modern chemist; it means much tasting and no wasting; it means English thoroughness and French art and Arabian hospitality. . . .

Though the setting of standards may vary and be influenced often by the personal equation, there are fairly well-accepted standards which have been established by homemakers, schools and commercial firms. Standard products in cookery imply points about the general appearance, flavor, texture, color, size, shape, tenderness and consistency, as well as palatability, odor and seasoning. Standardized recipes are far more simple today because they stress method, temperature, quantity and appearance, yet even with all of these points itemized there is still one necessary ingre-

dient for a perfect product, even with standardized recipes, and that is seasoned judgment—for this it is simply impossible to find a substitute!

Your judgment may differ from mine, that of the hospital authorities from the restaurant executives, and all this results in a variation of food standards. To offset the fallibility of human judgment, we should never be quite satisfied with our final results; we should always be working for something just a little better.

Food standardizing began, perhaps, with desserts, followed by salads, sandwiches and general vegetable preparation. We now find ourselves standardizing with our chefs. We are all familiar with the standards set up for pies, cakes, and puddings; these have been accepted over a long enough period so that our bakers are now well-trained in the use of standardized methods and recipes. Likewise, our salad and sandwich departments have made a good start along standardized lines, but it is on the vegetable and meat cookery that we need to concentrate our efforts. Restaurants have learned that it is easy to set meat cookery standards on paper, but distressingly difficult to insure that recipes will be followed.

Vegetable cookery presents a difficult problem; we all should aim to serve freshly cooked vegetables. This can only be done by coöperation between those serving and those cooking the vegetables. They should be ordered only in amounts to carry for a 20 or 30 minute serving period and it is most important to return all vegetables to the kitchen that have lost their color by overcooking in the bain-marie. The rule should always be followed that no matter how large the quantity of vegetables required they should be cooked in small quantities in as short a time as possible before they are to be used. Because vegetables are in such popular demand today your guest and my guest soon form an opinion of our food standards just from the appearance of one or two vegetables served.

The American public is accepting the idea of eating out as well as accepting the idea of hospital care, more and more readily. We have a market and we have an advantage. Years ago people used to carry a dinner pail and dread hospitalization, but times have changed and today in the restaurant business we are trying to make our places so good that when the family goes downtown for dinner they will want to return. You in the hospital field are trying to make your food so good that each member of the family will want to go to your particular hospital if the occasion should arise.

We are in a business and must maintain standards in order to hold our old customers and get new ones. Even though you are in the hospital

business you can make your food so good and so attractive that the former patient will return and the new patient will choose your hospital because he has been told that you serve good food.

Finally, we can see that our problems, though at times seemingly at variance, are really quite similar. Our guests present the same problems whether they are in good or poor health. Therefore it follows that our method of procedure can be almost identical save for a few exceptions. Ours is a glorious profession and our duty that of aiming toward the highest food standard possible under given conditions. We may feel discouraged, whether we are doing a good job or a mediocre one, for the close and constant dealing with human nature, such as you and I are obliged to meet in feeding the public, is most trying to even the best of us. Miss Bacon's little poem aptly entitled "To a Pill," illustrates at least one problem that is common to both of us:

She always thinks she is a trifle ill,
Waits eagerly to catch a little chill,
Feeds meagerly on pap and scans her tongue,
Intent upon her liver or her lung.

She counts her pulse, detects a missing beat,
Elaborates on what she cannot eat,
Oh, give her what she needs if she is sick:
A wrap, a steak, a toddy and a kick!

WHEN YOU PLAN YOUR KITCHEN

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THE term "kitchen" as used in this discussion applies to one of the modern producing units in which food is prepared for a large number of persons, with due regard to nutritive values, expense and sanitation. The designing of such a unit must be preceded by a study of the management details; these details, in turn, being concerned with methods of purchase, storage, cooking, baking, serving, dishwashing, refrigeration, garbage disposal, ventilation, lighting, and so on *ad infinitum*. The solution of these problems calls for the intensive collaboration of an expert dietitian with a versatile architectural engineer.

When the time has arrived to start the design, the architect must request information from the dietitian as to the average and maximum number of meals to be prepared daily, a set of typical menus, the method of service to be used, and the character of clientele. Her reply might be, for example, 4,000 meals with a peak of 4,500 to be served to college students at small group tables by waitresses, in three dining rooms. Representative menus will be supplied. She will name the price to be charged for board, and the policy of the institution in regard to prorating the charge. All this depicts the character of the institution and guides the architect in coördinating all succeeding data and discussion.

The dietitian then states that her administrative staff will include a given number of assistant dietitians, each with special responsibilities. Besides these she will have the kitchen personnel needed to handle the work involved in the day's routine. Furthermore, the kitchen, or producing unit will be organized in such fashion that separate physical divisions will be needed to house specified tasks.

She may say that steam and hot water can be furnished from a central boiler plant; that edible garbage can be sent to a farm and indestructible debris to the city dump. She proposes to destroy combustible garbage in an incinerator connected with the kitchen.

While the dietitian is delivering herself of this load the architect meditates on the magnitude of his task and when she stops for breath he inquires about the available space and the type of building contemplated. To this she may reply that the building program limits her to a space of 75 by 150 feet; that the dining rooms to be served by the proposed kitchen are on the second floor of a brick building and that it is the policy of the institution to erect buildings of fireproof construction only.

From the architect, again: What types of fuel are available and what are her preferences? She submits that the community affords coal, gas, fuel oil, and electricity, and that she has no prejudices nor preferences—she simply wants to use the material that will give maximum results at minimum cost.

He now asks: What type of labor does she contemplate employing? To this she replies that she expects to employ women in the pantry for the preparation of salads, desserts, and similar dishes, and men in the main kitchen, in the bakery, and for dishwashing and cleaning. Furthermore, she expects to employ both white and Negro help. It is the joint problem then of the dietitian and the architect to solve the problem of segregation, both in regard to work and rest rooms. Also, she points out that she has the problem of caring for the student waitresses, and wants dressing room facilities for their use alone.

By this time the architect is impressed with the need for an early decision on floor space and so he asks what type and quantity of equipment will be used in each of the work units. As fast as she can, the dietitian supplies these details, along with descriptions, dimensions, and other necessary information. The architect then cuts out cardboard replicas of the plan of each item of equipment exactly to the scale on which he proposes to make his preliminary studies, and a conference is held concerning the best layout. The templates are moved about in all manner of combinations, until the most convenient and economical one has been obtained. This gives a preliminary idea of the floor space required for each department following which the larger question of relationship of departments to each other can next be determined.

In approaching the inter-departmental problem, certain fundamental facts must be considered, for instance, the space for administrative personnel. The office of the head dietitian should be easily accessible to the clientele, tradespeople and employees. The office of the assistant dietitians should be convenient to the various work units but not necessarily available to the public. The pantry, including the beverage section, food serving facilities, etc., should be adjacent to the main dining room with an entrance to it separate from that leading to the kitchen.

It is advisable to provide one entrance only for all labor. This minimizes the probabilities of theft and provides good administrative control.

The main kitchen, because of the presence of cooking odors, noise, and volume of work, may be more remote from the dining room but not so far that transportation of food becomes irksome. Within itself, the ideal arrangement for the main kitchen is to have the meat preparation section

contiguous to the ranges and roast decks, the vegetable section contiguous to the steam cookers, the bain-marie and work tables parallel to both sets of cooking equipment, the food warmer or steam table and plate warmers parallel to the work tables and the main aisle parallel to the food warmers. Such an arrangement gives a straight line movement from preparation areas to the serving agencies. Local conditions frequently disturb this ideal arrangement.

The glass, silver and dishwashing departments, usually considered apart from the kitchen, may or may not be contiguous to it. Because of the noise accompanying the dishwashing, it may be advisable to have it as remote from the dining room as possible, even to the point of locating it on another floor. In the latter case, specially designed dumbwaiters or conveyors are used to carry the soiled dishes to the dishwasher and return the clean ones to the main floor. When not located on another floor, it is desirable to enclose the entire dishwashing area with an acoustically treated, sound-deadening canopy. Incidentally, the noise from dishwashing has a high frequency, or is high pitched; thus in selecting a sound-absorbing material it should be chosen for its efficiency for frequencies at or above 512, or the musical note, middle C.

The receiving and storing of raw materials should be separated from the cooking department, preferably on a floor with a grade entrance. The ideal arrangement is to have an office through which all supplies are received and issued. This room should adjoin a corridor from which open the main store room, the cold storage, the main material elevator (if on a lower floor) and such adjuncts as may be located on the ground floor. No traffic except that concerned with supplies should use the supply entrance. The room should be furnished with a set of good platform scales, a desk, filing cabinets and the like.

While on the subject of storage, it might be mentioned that certain materials, such as flour and sugar, should have doubly screened compartments within the main one to guard against vermin. Despite all precautions, vermin will enter in crates or packages and once in, are difficult to exterminate. Also it is a wise precaution to have separate locked compartments for small expendable equipment and utensils.

The bakery, because of its separate organization and character of operations, may be remote from the kitchen, provided that its products can be easily delivered to the serving room. It should be convenient to the storeroom. Should it be situated on a lower floor, as is frequently done, it should be convenient to an elevator that opens into the serving room on the floor above.

The cold storage plant must be convenient to the supply entrance and to all departments, thus presenting a major problem in planning. Because of the absence of windows it may be located in an interior area on any floor. The machinery serving it should be in an adjacent room with an outside entrance to permit independent entrance by the maintenance mechanic. These characteristics suggest a lower floor or basement convenient to the elevator.

A necessary adjunct to practically all kitchens is a garbage refrigerating room even though the garbage is disposed of locally or contracted out. Under any arrangement there is always an interval during which it must await disposal; it should therefore be refrigerated to approximately a freezing temperature. The obvious location for such a room is adjacent to the cold storage department so that the same machinery may serve both purposes; however, because of the great difference in function between the two, this is not always feasible. A refrigerating machine of sufficient capacity for the garbage disposal room is not very large and can be tucked away into nearly any small corner convenient to cold water, power and drainage.

It might be inserted here that electric transformer vaults, steam distribution rooms and cold storage machinery rooms should be planned so that mechanics can enter these rooms at any hour without disturbing the interior routine of the department.

The arrangement and location of rest rooms depend on the character of organization that the dietitian contemplates. It will be necessary to have separate rooms for men and women and in some localities to divide further the group by race. The dietitian will state the number and character of service demanded for each group of workers and probably will call for complete complements of lavatories, showers, toilets and locker space, with a small lounging space for each class. She will also supply information concerning the requirements for employees' dining room facilities, and note that lavatory conveniences for the administrative staff should be provided.

There will be other units to be given consideration: namely, linen room, cleaning closets for each unit, cabinets for dishes and utensils, and parking space for trucks. It is the responsibility of the dietitian to have her needs for work units listed, and to present the list with reasons for the inclusion of each unit. The architect cannot be expected to know the needs of a particular organization in minute detail.

Having determined in joint conference the space required for each department, and pondered the fundamental location requirements just

enumerated, the architect usually goes to his office, and with his head swathed in a wet towel, proceeds to match up the jig-saw puzzle. Certain sign posts will soon appear. Limitations of space will dictate some bounds. The fundamentals will indicate others. He will find that there are several arrangements for nearly every department, and no place whatsoever for some. But the show must go on so he puts something down on paper and treks back to the dietitian. She will be instructed as to the scale of the drawings and the meaning of certain conventional signs on the blue prints and will be requested to confer on the layout with her staff. Mr. Architect then leaves his sketches and escapes to a fishing appointment. On his return he will learn that he was all wrong in every premise, but then what could be expected of a mere architect! This he had anticipated but rejoices to find that some really constructive ideas have been developed in his absence and progress made. After further discussions, plans take final shape.

Assuming now that all of the departments have been placed, the traffic lanes laid out to eliminate cross currents, areas for concentration of individuals and working equipment provided, other coördinate problems can be attacked. Probably the first will be the fuel problem. It is of vital importance and requires the best technical thought of both the architect and the dietitian. Obviously, the high points to be considered are the relative cost of purchasing and operating electricity, fuel oil, gas and coal. Equipment using all classes of fuel has been highly developed and each has enthusiastic advocates. Having made the decision as to type, it becomes the duty of the architect to analyze and determine the problems of fuel handling and storage, power characteristics, safety devices, automatic control devices, etc.

In the design of the cold storage plant, again the closest coöperation between the dietitian and the architect is necessary. She must know the character and quantity of the various articles to be stored, materials to be segregated, and temperatures required by each. He must advise on number and size of rooms, arrangement and specifications for the machinery.

The heating problem can be solved entirely by the architect. Knowing the volume of the room, the extreme difference in temperature between the interior and the outside, the number of times the air should be changed per hour, and the character of power and heating agent to be used, it is but a mathematical effort to specify the capacity and type of machinery to be used.

For ventilation, forced draft is preferred to any other, but it involves the expense of first cost, operation and maintenance. Thus, a kitchen on a top floor is preferable, where by means of properly proportioned and located ventilating skylights, a natural draft ventilation and in addition, natural light, can be obtained. Rooms below the top floor will have to be supplied with exhaust fans.

If conditions permit super-refinements, air-conditioning or the controlling of humidity and temperature by mechanical means, can be considered. It is a highly specialized science, requiring the services of a specially trained engineer if the cubical contents of the building or room are large. For small rooms, a number of satisfactory, economically operated, and inexpensive unit machines are on the market.

Intercommunicating telephones should be installed in every large kitchen and should connect the office of the head dietitian with each of her departments. Inexpensive, if installed while the building is being erected, they may or may not be arranged to connect with the outside commercial lines, according to the preferences of the dietitian. If commercially connected, they are much more expensive in first cost and operation.

Vacuum-cleaning systems are desirable for any food unit. The well-known portable ones are reasonably satisfactory, but it is now standard practice and comparatively inexpensive to install complete piping for operating from a central machine, if installed during the building operations. Once installed, they are less expensive to operate than the portable electric ones.

Frequently it is desirable to wire large dining halls for public address systems. The apparatus is standardized and easily installed. If contemplated, the dietitian should indicate the proposed seating arrangements and the rest is simple for the architect.

The problem of lighting should be carefully considered by both parties. The dietitian should state the character of operations to be carried on in any given area and the architect can design accordingly. For instance, it is not necessary to have very high-powered lights along passageways or in storage spaces, whereas centers for complex food preparations require ample illumination. Furthermore, it is essential that certain areas can be switched off independently of others, in the interest of economy. The distribution panels, with their switches and fuses, should be readily accessible so that an attendant can quickly replace burned-out fuses or switch off certain circuits when needed. The prob-

lems of determining circuits, sizes of copper wire or intensity of light are essentially architectural. The architect, in turn, before writing specifications, should consult an electrical engineer for detailed information.

Unless conditions are exceptional, a substantial amount of electric power will be used in every kitchen regardless of the type of fuel used in cooking. The total will probably be sufficient to justify special study. As a brief guide, it might be suggested here that for reasons of economy apparatus consuming more than 2 kilowatts are best operated on 3-phase, 220-volt circuits and protected with automatic circuit breakers. The use of 3-phase current calls for 3 transformers, which are, of course, rather expensive. This means that there should be a sufficient number of the 3-phase apparatus to justify the initial expense. Apparatus smaller than 2 kilowatt capacity are best operated on the lighting circuit, which is usually 1-phase, 110 volt. The automatic circuit-breakers or fuseless switches eliminate the expense and inconvenience of replacing blown-out fuses and are coming into general use.

In the matter of construction materials and details, first consideration should be given to the structural design. It is now quite general practice to erect permanent buildings two or more stories in height with a reinforced concrete or structural steel skeleton, using masonry outside walls, concrete floors, and some type of slow-burning interior partitions. The problem of deciding which type materials to use should be left to the judgment of the architect. He will have in mind local conditions, architectural harmonies, economy of cost and character of workmen available.

In the matter of interior finish, the dietitian will usually express her preferences. However, it is appropriate to comment on some of the main features. It is essential that kitchen floors be liberally supplied with ample floor drains. They should be located in easily accessible places and the floor should slope slightly toward them. Since the piping is frequently complicated, the matter needs serious thought by the architect. The dietitian's responsibility is to indicate the points at which they will be needed.

Similar reasoning applies to wainscoating of kitchen walls. Besides the hard, non-absorbent features, all corners should be rounded off to eliminate dirt-catching interior angles or exterior angles that are easily chipped off. If the hard wainscoating material is not carried to the ceiling, it should at least extend beyond the area usually splashed, rubbed, or finger-marked. Five feet should be a minimum height, six is much better. It is preferable to have the tile or other hard material run flush with the plaster above and simulate a wainscoat cap or chair rail with a

contrasting colored tile. A hard, smooth finish plaster should be placed above the wainscoating and on the ceiling. All plaster and woodwork should be given not less than three coats of hard washable paint, several good brands of which are on the market. Obviously, light colors are preferable. Where trucking and other moving of heavy packages are likely, all exposed corners may be protected with heavy, rounded, metal corner guards built in at the time the wainscoating is being applied. Standard forms of these are manufactured, but it is usually just as economical for the architect to detail what is wanted and have it made to order.

The foregoing, without going too deeply into burdensome detail, gives a reasonably clear picture of the manner of approach to the design of a large kitchen. The character of a present day food-producing unit is so complex that no dietitian or architect, alone, can be expected to handle adequately the problems of its design. The problem is most advantageously met when plans are worked out jointly by the two concerned—the architect and a technically trained dietitian.

REBUILDING THE NURSING CURRICULUM

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IN THE curriculum revision program which the National League of Nursing Education inaugurated in the fall of 1934, nothing has been more encouraging and gratifying than the interest and the fine coöperation of our colleagues in other professions and among these professions none has contributed more than our friends the dietitians. It is a great pleasure, therefore, to respond to their request for a short article on the work of the Curriculum Committee and at the same time to thank the members of the American Dietetic Association who have so generously shared in our labors.

Many of you know something of the efforts of nurses to build up a sound, modern system of professional education. This struggle has been going on for over sixty years and it is only within the past twenty-five years or so that we have begun to recognize the main cause of our difficulties. The Nightingale system was introduced into this country in 1873, chiefly for the purpose of supplying a better nursing service for hospitals. There was also the idea of training young women for a new profession, but it was assumed that these two purposes were more or less identical, education in nursing being considered as a by-product of nursing service. In the same way, the nursing staff of the hospital was expected to do double duty in running the nursing service and in directing a program of nursing education. This very economical plan of establishing nursing schools as a means of servicing hospitals became very popular, and hospital schools multiplied at an enormous rate. Under these conditions educational standards were constantly sacrificed to the hospitals' needs for workers, and in too many instances the title of "school" could be applied only by courtesy to such institutions.

Partly as a result of two recent surveys of nursing and nursing education and the bitter experience with overproduction and unemployment of nurses during the depression years, thoughtful people concerned with hospitals and nursing schools are seeing more and more clearly that the present system of nursing education must be readjusted if not entirely reconstructed. Experiments have been going on for a number of years with a new type of nursing school which is connected with a university or college on the same basis as other professional schools. Hospitals supply the students with clinical experience and take an active share in the work of preparing nurses, but the whole program is planned according

to the students' educational needs and not determined by the economic needs of the hospital. Collegiate schools of nursing are quite definitely on the increase and the present trend seems to be in this direction. Although most nursing schools still remain under hospital control, there is an increasing tendency to emphasize their educational functions and to develop their educational programs in accordance with the requirements of the community as a whole, instead of the service needs of the individual hospital.

A period of transition is always an anxious time but it is also a time when much can be done in the reshaping and redirecting of programs and policies. Certainly the nursing profession needs to take stock at this time and to consider especially what changes should be made in the present program of education. In considering how we might stimulate the thinking of our members and work out a plan of action for the immediate future, the National League of Nursing Education decided to begin by getting its members and friends to work on the Curriculum. After all, a curriculum is simply an educational plan or chart, and if we can come to some agreement on the goals to be reached, the direction in which we should move and the best routes to take toward our objectives, the next steps will be more easily taken and we can work together more intelligently in bringing about the changes needed. To be sure, a curriculum needs to be implemented and the most perfect curriculum is likely to be a hopeless failure unless the necessary personnel and resources can be secured to put it into operation. But we must first decide what kind of nurse we should try to produce and then we shall have to find a way of adjusting our present educational machinery or creating new machinery to provide for the necessary preparation of this type of worker.

It will be readily seen that the rebuilding of the nursing Curriculum involves a good deal more than the addition of a few subjects or items of information and the elimination of materials that are more or less out of date. The functions of the nurse are changing; we have to reconstruct our program in terms of a much broader concept of nursing service, which includes preventive as well as curative work, the nursing of the mind as well as the body, teaching as well as ministry to the sick, and service to families and communities as well as to individuals.

With this changing concept of nursing, we are also arriving at a changing concept of the aim and process of education. In the past, the nurse has been trained rather than educated, and the system of hospital discipline has been regarded as the very essence of that training. This system is a direct inheritance from the religious orders and the military organiza-

tions with which nursing has been more or less closely associated in times of war and disaster. While we will all agree that there are times and situations in which unquestioning obedience is necessary, we are beginning to realize that it is practically impossible to develop a resourceful, intelligent and adaptable worker unless we provide plenty of opportunity for her to use her intelligence and to assume responsibility for her own conduct. Many of us feel that the concept of adjustment or growth as the aim of nursing education should be substituted for the aim of discipline. It is certainly more in harmony with the principles of democracy which we all profess, and the methods of modern science which are supposed to be in control in the hospital and medical world. Discipline has an important place in such a concept of education but it should be a form of self-discipline that arises from within rather than one that is imposed from without.

There are many other recommendations of a fundamental character which we are planning to incorporate in the new curriculum. One of the most radical is that nursing schools should exist primarily for purposes of education. Strange as it may seem, there is still a good deal of controversy on this point. In order to give the necessary time for study, it is recommended that the hours of definitely assigned student work in classroom and wards should be reduced to forty-four, weekly. Also, in order to supply the needed educational background and bring in students of greater maturity, nursing schools are advised to advance admission standards as soon as possible to two years beyond high school. It is not expected that these changes will take place overnight nor that all nursing schools will adopt them, but it is believed that these are the lines along which progressive schools should move within the next few years.

The National League of Nursing Education has never considered its curriculum as a *requirement* for any school. Although some nursing schools have copied it more or less exactly, it was never intended to be so interpreted or used. The League committee that has been responsible for the Curriculum since 1917 thinks of it as a means of bringing together the best thought and best practice of the profession in relation to the basic program of education, of helping nursing schools in building their own curricula and of interpreting to those who wish to study nursing education, what may be considered as an acceptable program of nursing education in this country. It gives a lead to schools that want to go forward along progressive lines, but no school needs to follow that lead unless it so desires.

The work of the Curriculum Committee is organized so as to utilize

the interest and the judgment of a wide variety of people engaged in nursing and in related fields. At the same time responsibility for policies and for the production program are centered in the Central Curriculum Committee and its sub-committees. Several months were spent in building up the organization and in collecting and preparing materials for the Production Committees. This included the setting up of aims and standards and the outlining of a philosophy of education. Those who are interested will find these subjects discussed in a series of articles issued monthly in the *American Journal of Nursing* from January 1935 to August 1935, and also in the 1935 *Proceedings of the National League of Nursing Education.*

During the spring and summer of 1935, much of our time was spent on outlining the program of studies as a whole and preparing tentative outlines of the various courses. About two hundred people participated in this work as members of Production Committees and as consultants to such committees. In the meantime, the State Curriculum Committees were organizing study groups and as soon as the tentative outlines were ready they were issued to these groups with a special bulletin which was intended to help them in interpreting the materials and in preparing their criticisms and suggestions. About five hundred study groups have been organized in the various states with about two thousand members, including nurses, physicians, dietitians, social workers, psychologists, and many others who share in the teaching of nurses and who are specialists in different subjects. In addition, nearly fifty nursing schools collaborated with the committee in trying out one or more of the suggested courses with their own classes. The results of all these experiments and deliberations were sent back to the Central Committee and were then distributed to the Production Committees so that they may be used in the reconstruction of the tentative courses.

There are several other studies going on concurrently with the work of course production; among these are studies on admission requirements, extra-curricular activities, library facilities, methods of instruction and the installation and operation of the curriculum. The results of all these studies will probably be ready for publication early in 1937.

In regard to the place of nutrition and dietetics in the new program, the following points may be of interest. First we have come to the conclusion that nutrition and nursing are so closely related that it is practically impossible to separate them even if this were desirable. In the new plan every effort has been made to bring them into the closest possible relationship. After all, it should not be difficult to bring nursing

and nutrition together because they come from the same root and the words originally meant the same thing. While the introductory work in nutrition and diet therapy is organized under two separate courses, it is planned to continue the teaching of these subjects throughout the entire program, integrating the material in relation to diet with the different clinical subjects, in both class and practical work. This means that we are strengthening the nutrition phase of nursing and giving a good deal more time to it than we have given before. There is more emphasis on normal nutrition and especially on the feeding of well children and family dietaries. The first course on nutrition and cookery is placed so that it follows the courses in anatomy, physiology and chemistry, instead of paralleling them. The course in diet therapy runs parallel with the course in medical and surgical nursing and is so arranged that it dovetails into that course. Other points in the recommendations of the Production Committee (which is composed of nurses and dietitians) were brought out in Dean Howell's address at the Cleveland meeting of the American Dietetic Association.

The new plans will require better prepared teachers in both nursing and dietetics and much closer collaboration between the two groups. The fact that our two associations have worked so happily and productively on our common educational problems during the past years gives us all possible assurance that dietitians and nurses on the faculties of nursing schools will be equally successful in working out the new problems involved in the actual operation of the new curriculum.

ONE EFFECTIVE MEASURE IN THE TEACHING OF STUDENT NURSES AND DIETITIANS

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INTROSPECTION reveals how much of the theory taught is forgotten, while observation of students indicates that such forgetfulness is characteristic of most human beings. In order to cement theory with the stout mortar of practice, many professional courses now include part practical work or are followed immediately by a period of time devoted only to the application of theory. In the training of student nurses an excellent opportunity of combining practice with theory presents itself.

In that portion of the curriculum which deals with dietetics the procedure has been, up to now, first, a course in nutrition and cookery followed by diet therapy and finally diet service. According to the new curriculum of the National League of Nursing Education, students are first being given an orientation course planned to introduce them to and interest them in nutrition. To keep these courses from being separate entities, St. Mary's Hospital uses a method of integration that materially aids the student nurse and gives better service to the patients.

The organization of the hospital food service is briefly as follows. Food, prepared in the main kitchen, is requisitioned every morning in serving portions by the dietitians—each for her own wards. The prepared food is sent in bulk to the ward serving pantries. It is served by the student nurses, with the assistance of well-trained maids, under the supervision of the dietitian. Only such food is cooked in the serving units as cannot be conveniently prepared in the main kitchen or which would be spoiled by advance preparation.

The student nurse is assigned to the diet service for eight weeks' full-time duty. She is rotated, while on the service, so that she receives experience in a number of the ward serving pantries. The work differs somewhat in each unit but in general the nurse serves trays, prepares and serves mid-meal nourishments, assists in setting up all trays for general and special diets, checks all returned trays, visits and interviews patients daily, reads charts, does the necessary charting and reads selected articles pertaining to the service in which she is working. Also in her eight weeks she writes three detailed case histories of special dietary value on blanks designed for that purpose.

These duties help in correlating the work learned in the prescribed

courses in dietetics which precede the diet service. However, the correlation is best obtained by the daily half-hour conferences, similar to the daily report held by the nursing department of each floor, which are conducted for those students who are on diet service.

When the rush of breakfast, between-meal nourishments and cleaning has somewhat subsided and the noon preparation has not yet begun, the nurses and student dietitian meet with the staff dietitian in her office. Each section or ward meets daily but all meet together biweekly for a symposium. First, the nurse on senior duty who sees the patients each day, gives her report. She reads the entries made against the items in her check book, in which a record is kept of the patient's room number, his name and type of diet. Space is set aside for records of breakfast, dinner and supper, including a "Remarks" column for the variable items such as: why the food was not eaten, whether or not the patient is content on his regimen, and any questions he may have asked pertaining to diet. Here should be included the answer given by the nurse, and also the patient's own suggestions for alterations, with consideration of his likes and dislikes or idiosyncrasies.

When the nurse has finished this part of her report, she mentions any tests made on the patient, their significance, and his progress as noted from his comments, his appearance or the physician's notes on his chart. Through this report all the nurses learn who the patients are, why they are hospitalized and the state of their progress. They also have some understanding of each tray as it is served and the type of diet it represents. When the nurses change duties they are better able to adapt their services to the patients without wasting time in making adjustments.

When the report is concluded, about five minutes of the conference are spent in looking over the modifications of the general menu for the therapeutic diets. The nurses are then able to start setting up trays immediately after the report with only an occasional glance at the plan which is hung above the steam table for reference. No more time is necessary for the routine described because of the simple form used. Each floor rules its own form with regard to the kind of special diets, as their number and kind vary throughout the house. A sample of an ordinary menu plan for one floor shows its simplicity.

The remainder of the half-hour conference is spent in discussion of various phases of the service concerned. The subjects follow no routine order but are selected according to the types of diets being served and the situations arising during the day; they are modified depending upon the length of time the nurses have been on the service and their char-

Sample menu plan

GENERAL	HIGH CARBOHYDRATE	BLAND ANTI-CONSTIPATION	ULCER C	ULCER B	DIABETIC	REDUCTION	RIGID REDUCTION
			Dinner				
Cream of corn soup	+	Strained	+	+	Clear Broth	+	+
Baked chicken	+	+	+	0	+	+	Plain boiled
Mashed potatoes	+	+	+	0	Baked if 20% is allowed	0	0
Buttered string beans	+	+	Puree	0	Plain string beans, 100—5% veg.	+	+
	0	0	Toast	0	Plain carrots, 100—10% veg.	+	0
Celery heart Cranberries	+	Shredded lettuce, Mayonnaise	0	0	Celery heart—head lettuce 50—5% veg.	+	+
Vanilla ice cream	+	+	+	+	Fresh peaches, 100—10%; 15–50—5% veg.	+	+
			Supper				
Cold ham	Creamed eggs on	+	+	0	Cold ham—60	Cold veal	+
Potato salad	Steamed rice	+	+	+	if 20% allowed	0	0
		Asparagus tips	Puree	0	Plain asparagus, 100—5%	+	+
Sliced tomatoes	+	0	0	0	100—5%	+	+
Pears, canned	+	+	+	Baked custard	Pears (sugar free), 100—10%	+	+
Chocolate cake	small	+	Vanilla wafers	0	0	0	0

NOTE: + indicates the patient may have the food noted in the column preceding it.
0 indicates the patient may not have the food and there is no substitute for it.
Otherwise, substitutes are indicated under each diet in the proper space.

acteristic abilities. Each dietitian makes an outline of suggested topics which she tries to cover in the time allotted. The following skeleton plan shows the range of subjects covered:[1]

I. DIET NURSE'S AND STUDENT DIETITIAN'S ROUTINES. CASE STUDIES
Six or more periods used to discuss housekeeping, methods of serving, (with emphasis on economy of time, effort, and supplies) manner of visiting patients, checking returned trays, charting of facts pertinent to food service, and writing and presentation of case studies.

II. METABOLIC AND UPPER GASTRO-INTESTINAL SERVICES
Diabetes, gastric ulcer and complications, diseases of the liver. Six or more periods used to discuss the underlying principles of the diet in relation to the disease, specific diet routines used, interpretation of laboratory data, methods of calculation, complications which may change the diet order, adequacy in relation to normal nutritional requirements.

III. COLON SERVICE
Ulcerative colitis, cancer, diverticulosis, constipation, diarrhea, sprue. Six or more periods for discussion of the diet routines used, their adequacy in relation to normal nutrition, similarity of many of these routines, use and sources of vitamin concentrates.

IV. ARTHRITIC AND CARDIO-RENAL-VASCULAR SERVICES
Arthritis, nephritis, hypertension, cardiac disease. Periods as needed to discuss diet therapy in use, treatment of constipation in arthritis, restriction of salt in nephritis, protein content of the diet in nephritis, Karrell diet.

V. POST-OPERATIVE SERVICE
Post-operative diets in general, in gastro-enterostomy, colostomy and gall bladder disease, and in tube feeding. Periods as needed to discuss types of liquids, food sources for high carbohydrate, low fat diets, foods used to make up tube feedings, dietary requirements following gastro-enterostomy, residue in relation to colostomy.

VI. PEDIATRIC SERVICE
Formulas, supplementary foods, children's diets, normal and therapeutic. Discussions of metabolic needs of children as they vary from the adult, formula preparation and types of modifications used, therapeutic diets for children and their variation from adults, methods of teaching good food habits.

In order to avoid too frequent repetition, a monthly record is kept of the time devoted to each topic and of the nurses present at these daily conferences. This record is checked by the training school.

Symposiums for the personnel of the entire department replace two of these conferences each month, from September until June. Cases of

[1] *Editor's Note:* In the interest of space saving, it was necessary to summarize and rearrange the author's original outline of lesson plans. The summary is merely suggestive of the ground covered in each subject.

special dietary interest are presented and may be selected from any section of the hospital. Two alternate methods are used. One gives the student nurse an opportunity to observe the form of presentation as well as to profit by the material offered; the other gives her valuable experience in taking an active part in the symposium. In the first, a student dietitian presents the complete case history. This includes:

1. Mention of sex, age, height and weight of the patient
2. Brief sketch of his past history
3. Such family history as relates to the case
4. Details of the immediate past history
5. Symptoms on hospitalization
6. Laboratory tests made; the results, including a comparison with the normals
7. Diagnosis
8. Treatment given; its purpose
9. Medications; their purpose
10. Special emphasis on dietary treatment
11. Progress expected; how far it has been realized
12. Presentation of graphs or charts to illustrate any of these points for added interest, clarity or emphasis

After the presentation of the case history, a staff dietitian discusses the general dietary treatment for the disease under consideration and illustrates with the case being given those points of similarity or difference. After this a doctor discusses the general and specific surgical or medical aspects.

In the alternate method, the nurse and student dietitian assume the responsibility, the former presenting the case as described, the latter giving the diet discussion. A doctor again supplements as above. A staff dietitian is appointed to assist or advise but she does none of the actual preparation. In either of the two methods the student and staff members attending are encouraged to ask questions or contribute to the discussion. Summaries of all the meetings with accompanying graphs and charts are kept on file and may be used for reference by the staff in the daily conferences or in class work. The past year included reports on cases of obesity (moderate and rigid reduction), nephritis and nephrosis, diabetes, infectious and gouty arthritis, malnutrition, treated with and without insulin therapy, medical and surgical peptic ulcers, chronic ulcerative colitis, colon surgery and epilepsy. Many of these cases were simple but others were a combination of several disturbances. For example, one was that of a young diabetic who also had celiac disease and was extremely malnourished. Another, an adult female diabetic, had had a lengthy course of tophaceous gout.

The plan in use at St. Mary's Hospital is an example of how the student nurse's practice in the diet kitchen can promote understanding of the basic concepts, principles, relationships and generalizations, rather than a mere acquisition of facts and information. In a similar way benefits are derived by the student dietitian since she is given an opportunity to conduct many of the daily and a few of the biweekly meetings. The plan makes for better integration in the course as offered, since the student learns best from actual situations, cases and demonstrations.

FURTHER STUDIES OF THE CONTENT OF VITAMINS A AND B IN CANNED STRAINED VEGETABLES[1]

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THIS paper supplements our previous reports (1, 2) on the vitamins A and B content of canned strained vegetables. Herein are presented vitamin A determinations of spinach, carrots, tomatoes, peas and green beans from the years 1932 and 1933 tested in the same series of rats, and the vitamin B determinations of the products of 1934, all in terms of international as well as Sherman units. This gives a more adequate presentation of the range and comparison of their vitamin potencies from year to year.

The vegetables were grown in the same locality, under similar soil conditions and with very few changes in varieties. They were carefully graded as to appearance and degree of maturity. However, the weather was an important variable, especially since 1933 and 1934 were drought years. Some changes were made in factory method. Cans of strained vegetables were dated and set aside daily from the regular pack.[2] From 24 to 48 cans chosen equally from the various dates were pooled and used for each test. The error in sampling was thus practically eliminated, as these vegetables were representative of the entire season's product rather than of a casually chosen collection from the warehouse or grocer's shelves.

DETERMINATION OF THE VITAMIN A POTENCY OF VEGETABLES CANNED IN 1932 AND 1933

The test method was that of Sherman and Munsell (3) and differed from that in the work previously reported (1) by including 10 per cent dried baker's yeast in the basal diet instead of feeding 0.4 gm. yeast separately daily. The experimental period extended for 5 weeks and positive as well as negative controls were fed. The positive controls were given U. S. P. Reference Cod Liver Oil diluted with Wesson oil, thus permitting the comparison of data in terms of international units. The foods packed in 1932 and 1933 were fed to litter-mates and the various supplements of vegetables and of Reference Cod Liver Oil were

[1] Financed by a grant from the Gerber Products Co. Received for publication, April 15, 1936.

[2] Supplied by the Gerber Products Co.

TABLE 1

Data on rats in vitamin A tests of strained vegetables canned in 1932 and 1933

DAILY SUPPLEMENT	TOTAL SOLIDS*	NUMBER OF RATS	AVERAGE WEIGHT AT DEPLETION	AVERAGE DAILY FOOD CONSUMPTION	AVERAGE WEEKLY GAIN IN WEIGHT	INTERNATIONAL UNITS VITAMIN A IN DAILY SUPPLEMENT‡	INTERNATIONAL UNITS VITAMIN A PER OUNCE§	SHERMAN UNITS VITAMIN A PER OUNCE¶
	%		gm.	gm.	gm.			
None		32	86.4	4.82†	−6.72†			
0.5 international units cod liver oil		6	92.8	5.76	−2.20			
1.0 international units cod liver oil		6	88.3	6.42	+1.04			
1.5 international units cod liver oil		10	87.0	6.97	+3.36			
2.0 international units cod liver oil		10	92.5	6.90	+4.12			
20 mgms. spinach, 1932	6.59	6	87.5	7.32	+5.44	2.54	3594	2567
20 mgms. spinach, 1933	7.80	9	89.9	7.34	+5.06	2.36	3339	2385
30 mgms. carrots, 1932	8.29	7	90.0	7.00	+4.08	1.90	1792	1280
30 mgms. carrots, 1933	8.92	7	90.1	7.77	+4.28	2.00	1887	1348
35 mgms. tomatoes, 1932	14.80	8	96.3	7.11	+3.52	1.64	1326	947
35 mgms. tomatoes, 1933	13.96	6	94.0	7.81	+2.94	1.37	1108	791
150 mgms. peas, 1932		6	86.8	6.56	+2.70			
200 mgms. peas, 1932	12.71	6	88.2	7.07	+4.10	1.91	270	193
250 mgms. peas, 1932		7	85.6	7.07	+6.16			
200 mgms. peas, 1933	14.47	6	80.2	6.24	+4.94	2.31	327	234
250 mgms. peas, 1933		5	87.4	7.16	+6.36			
225 mgms. green beans, 1932		5	86.8	6.38	+2.56			
250 mgms. green beans, 1932	6.81	6	83.3	7.13	+3.70	1.73	196	140
250 mgms. green beans, 1933	7.45	8	84.1	7.05	+6.50	3.04	344	246

* Determined in the vacuum oven at 70°C.

† Based on the average survival period of 28.7 days.

‡ Calculated by simple proportion from the weekly gain and the 3 gms. gain per week of 1.4 international units.

§ Using the same method of calculation of data presented in the previous report (1), the following values in terms of international units per ounce are obtained for the 1930 or 1931 products: spinach, 3339; carrots, 1726; tomatoes, 1215; peas, 218; and green beans, 228.

¶ Number of international units divided by 1.4, equals Sherman units.

widely scattered throughout the various litters. The general care of the animals and collection of data were the same as has been used previously in this laboratory.

The bodily stores of vitamin A in these rats were more quickly depleted than in the groups previously reported (1), as evidenced by the fact that, for the 32 litters in this series, the average depletion time was 28 days. The negative controls lived on an average 28.7 days after the test period began and experienced a loss of 27.8 gms. in weight. During this time, 38 per cent of the negative controls showed respiratory trouble, and 100 per cent had ophthalmia, usually severe. At autopsy, foci of infection were noted at the base of the tongue in 78 per cent and in the glands of the neck in 25 per cent of the rats. Pus was found in 81 per cent in one or both middle ears, while 94 per cent of the rats had abnormal lung tissue. The positive controls were fed 0.5, 1.0, 1.5 or 2.0 international units of the Reference Cod Liver Oil as shown in table 1. Calculated from the 1.5 and 2.0 unit levels of cod liver oil, respectively, 1.34 and 1.46 international units were equivalent to one Sherman unit. An average of the two values gives 1.4 international units, which is the relationship found in other laboratories as equal to 1 Sherman unit.

Table 1 includes also the data on the rats fed the various canned strained vegetables. The good sources of vitamin A—spinach, carrots and tomatoes—were quite uniform for the two years, but peas and green beans, the fair sources, increased in potency in 1933. In 1933 the factory method for spinach was changed by the use of a steam blanch and shorter cooking time; for tomatoes, by a new cooker for evaporation; and for carrots, by a shorter cooking time. The method for peas and green beans was essentially the same during the two years. If the values in Sherman units previously reported (1) for products canned in 1930 and 1931 are calculated in terms of international units per ounce, as shown in the footnote of table 1, they do not vary greatly from the 1932 or 1933 determinations, except that peas showed some improvement. Thus, for the three years, spinach contained 3339, 3594 and 3339 international units per ounce, respectively; carrots, 1726, 1792 and 1887 units; tomatoes, 1215, 1326 and 1108 units; peas 218, 270 and 327 units; and green beans, 228, 196 and 344 international units of vitamin A per ounce. Except for the increase in vitamin A potency of peas and green beans, these variations are within the range of errors of the biologic test method.

DETERMINATION OF THE VITAMIN B CONTENT

The assay of these foods was made by the Chase and Sherman method and, as previously reported, rat harnesses were used to prevent cop-

rophagy (2). We have found the Chase and Sherman diet adequate for good growth if supplemented by crystalline vitamin B_1 hydrochloride (Merck's) alone (4). For the average of the 23 litters used in this test,

TABLE 2

Data on rats in vitamin B tests of strained vegetables canned in 1934

DAILY SUPPLEMENT	TOTAL SOLIDS*	NUMBER OF RATS	AVERAGE WEIGHT AT DEPLETION	AVERAGE DAILY FOOD CONSUMPTION	AVERAGE WEEKLY GAIN IN WEIGHT	INTERNATIONAL UNITS VITAMIN B IN DAILY SUPPLEMENT‡	INTERNATIONAL UNITS VITAMIN B PER OUNCE¶	SHERMAN UNITS VITAMIN B PER OUNCE
	%		*gm.*	*gm.*	*gm.*			
None		12	71.5	3.70†	−8.33†			
0.5 international unit vitamin B standard		10	73.3	5.41	+2.26			
1.0 international unit vitamin B standard		10	73.7	6.20	+6.58			
1.5 international units vitamin B standard		10	74.4	7.45	+10.70			
1.5 gms. tomatoes§	13.96	10	75.2	4.97	−0.60	0.37	7.0§	14.0
3 gms. peas	13.44	9	75.9	6.47	+5.32	0.87	8.2	16.4
7 gms. carrots	8.58	10	72.1	5.67	+4.20	0.73	3.0	6.0
10 gms. green beans	6.56	10	74.8	8.70	+7.21	1.07	3.0	6.0
10 gms. beets	10.07	10	74.9	4.51	−0.84	0.36	1.0	2.0
6 gms. spinach	7.27	10	72.5	4.56	−1.44	0.33	1.6	3.2

* Determined in vacuum oven at 70°C.

† Based on the average survival period of 21.08 days.

‡ A curve of response was drawn by plotting the weekly gain in weight of control animals against the number of international units of vitamin B fed. Then from the point on the curve indicated by the weekly gain in weight on the vegetable supplement, the number of units of vitamin B in the supplement was read.

§ From 1933 instead of 1934. A recent test of 1935 tomatoes indicated 12.1 international units per ounce.

¶ If the values for 1932 products expressed in Sherman units per ounce (2) are divided by two, they are converted into international units and give the following results: tomatoes, 12.0; peas, 3.5; carrots, 2.2; green beans, 2.4; beets, 1.7; and spinach, 1.3.

it required 15.4 days for growth to cease on the basal diet. Rats from the various litters used throughout the entire series were fed 0.5, 1.0, or 1.5 units of the international standard vitamin B. The growth of the

litter-mates used as positive and negative controls was determined under the same conditions and in parallel with that of the other test animals.

The data are presented in table 2. While the growth of the rats fed 0.5 international unit vitamin B was only 2.26 gms. gain per week and not equivalent to 1 Sherman unit, the growth on 1 international unit is slightly more than for 2 Sherman units; an average of the 0.5 and 1.5 levels indicates also that 1 international unit equals 2 Sherman units as has been shown by Waterman and Ammerman (5) for the crystalline vitamin B.

The values as calculated in international units per ounce (table 2) indicate that tomatoes, with 7.0 to 12.1 units, and peas, with 8.2 units per ounce, are good sources of vitamin B, and that other vegetables are fair sources. If the values of the determinations on 1932 products expressed in Sherman units (2) are converted into international units, as shown in the footnote to table 2, and compared with the values in the table, peas are shown to be much superior in vitamin B in 1934, with carrots and green beans slightly better and with beets and spinach practically the same as in 1932. The 1935 test on tomatoes was of the same order as the 1932, but the 1933 product was poorer. None was canned in 1934, as the raw product was inferior due to weather conditions. The 1935 factory process for tomatoes as well as the 1934 process for all vegetables except beets was considerably shortened in heating time; all the vitamin B values for these years are higher, to some degree, and markedly so for peas, than for the 1932 products. This increase in vitamin B may be accounted for by the improvement in factory method through the use of the "shaker-cooker," or a seasonal variation in the raw vegetables, or both.

CONCLUSIONS

The range of vitamin A values of canned strained spinach for two years was from 3339 to 3594 international units per ounce; for carrots, 1792 to 1887 units; for tomatoes, 1108 to 1326 units; for peas, 270 to 327 units; and for green beans, 196 to 344 units. If the tests previously reported of vitamin A determinations for 1930 and 1931 products are calculated in terms of international units and included, we find a fairly uniform vitamin A potency in these products for three years except for the improvement in peas and green beans.

In vitamin B determinations, canned strained tomatoes were found to contain 7.0 to 12.1 international units per ounce; peas 8.2 units; carrots, 3.0 units; green beans, 3.0 units; beets, 1.0 units; and spinach, 1.6 inter-

national units per ounce. The vitamin B determinations previously reported vary somewhat from these values, especially so for peas which were twice as potent in 1934 as in 1932.

We are indebted to Ray B. Wakefield for the total solids determinations.

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THE BOSTON MEETING

Boston Beckons

Thrills historical and gastronomical are on the program for the Annual Meeting of the American Dietetic Association in Boston in October.

For the satisfaction of work, the relaxation of play and the joy of eating—well, as well as wisely—Boston and all New England have so much to offer!

The difficulty encountered by the planning committee has been chiefly one of selection of things to be seen and dishes to be eaten in the comparatively short time available; for one may live in Boston a year or more without trying all the savory, wholesome food preparations that are inherently and traditionally New England, and without finding time to visit all of the intensely interesting places of historical background.

Famed New England dishes will be included in the various luncheons and dinners, and Marie Casteen, food advisor of the Statler Hotels, has promised to have recipes available for all who may wish to take home more than the memory of a delectable sample.

Codfish cakes—New England has made them from the same recipe for generations, and they melt in your mouth.

Fish chowder—not a potato chowder but *fish* chowder that has the tang of the sea which pounds forever at New England's door.

Johnny cake—not southern corn bread but New England's improved version of the cake the Indians fashioned from their maize 300 years ago.

New England applie pie *is* New England apple pie without any counterpart in the nation's cookery.

And, of course, Boston baked beans and Boston brown bread are still famous and still satisfying.

That's just a little hint of what, speaking from the heart for the stomach, the meeting holds in store for delegates.

Feasts of another kind are also waiting.

Boston has an old world charm, not casually apparent but easily found, in churches, cemeteries, wharves, taverns and old houses that are sandwiched in between the more modern buildings throughout the city. Of course, its narrow winding streets with cobblestone pavements will always give away the fact that they were once cowpaths.

The trips planned for the convention start Sunday with a tour of old Boston including all the historic spots of the original colony. Boston Common, around which so much of the early life revolved, is fifty acres in size. It was set apart by the first governor for common use as a cow pasture and training field. It also became the public place of punishment for wrong doers when early justice was hard and sometimes cruel.

Today this same spot is a haven for tired and weary people, a meeting place for patriots and communists—many gather to feed the pigeons and squirrels, children from the North End swim in the frog pond and youngsters still use it as a training field for their baseball nines.

While visiting cemeteries is not ordinarily a particularly cheerful pastime, browsing around in those of New England affords pleasure and a mild amusement for the inscriptions are quaint and revealing. Within a few feet of each other, two very old Boston cemeteries are to be found, Old Granary and King's Chapel burying ground. Around this neighborhood on Pudding Lane lived Mother Goose, merrily singing her children to sleep with lullabys that were to make her name famous to all generations of children.

Benjamin Franklin, too, lived and worked here until his brother's unkindness drove him to seek his living in Philadelphia.

Paul Revere—noted mostly for his "midnight ride," but really a most accomplished and versatile gentleman, the greatest silversmith of his generation, statesman, engraver, editor and even a dentist when the occasion demanded—lived here in a house still standing.

Nearby is Faneuil Hall, originally intended as a market place by its donor, Peter Faneuil, who threw in the hall at the last minute. It is the "cradle of liberty" of the revolutionary period. Used frequently now

for political meetings, the hall is the central point of marketing in the city.

Faneuil Hall has a grasshopper indicator on its ancient weathervane and in colonial times, ship captains far from home used this as a test for stranded sailors who sought for passage to Boston. If they knew what marked the direction of the wind over Faneuil Hall it was proof enough they really came from Boston.

The old State House, from whose balcony the stamp act was declared void, and liberty first proclaimed, is now wedged between banking houses, brokerages and a subway entrance.

A short distance from town is the Isabell Stewart Gardiner Museum, popularly called Mrs. Jack Gardiner's Museum; this Venetian palace was moved stone by stone from its original setting and placed here by the courageous woman whose story makes such fascinating reading. The central feature of the building is the court which has a continual display of flowers in bloom. The museum galleries which overlook the court, contain a distinguished collection of art including a few Sargents and a very valuable Titian, as well as paintings of the Italian and Dutch schools, beautiful tapestries and furniture.

The charm of the past can be felt and seen by visiting some of the old houses which have carefully preserved the spirit and meaning of the olden days. These are scattered around the city and surrounding towns and trips have been planned to include as many as possible of them.

Marblehead has its Lee Mansion, Newburyport its ship models, Plymouth its Rock, Sudbury its Wayside Inn. They are all possibilities inviting a delightful weekend in New England at the loveliest time of the year when foliage is gorgeous and the days are crisp and clear. And longer trips have been planned for those with the time—Mohawk Trail, at its best in October, will be chosen by many.

Fish is synonymous with New England, coastal waters are rich in many marketable varieties. The modern fish pier, built after older ones were found to be inadequate for the business transacted, is the largest in the world devoted exclusively to the handling of fish.

At the pier a colorful and dramatic story is enacted every day and there will be a chance to observe it in the early morning trip planned for Friday. Fishermen arrive in with their catch, receive bids, dispose of what they call their "trip" and receive their money in less time than it takes to make a tour of this interesting spot—a change from the past when fishermen had to unload their boats, leave the fish with someone to sell and sail again without knowing what they would receive from the dealer until their return from another voyage.—HELEN O'BRIEN, *Local Publicity Chairman.*

What About Our Labor Standards?

One of the interesting subjects listed for our 1936 Annual Meeting deals with labor standards. Administrators especially will want to hear Ruth Scandrett of the United States Department of Labor speak on "What Constitutes Good Labor Standards".

Perhaps it will not be amiss for us to arrive in Boston with our thinking machinery directed toward recognizing the part we can play as employers of labor, and our minds open toward the possibility of each of us doing all in our power to raise labor standards in our own institutions.

By way of preparation for this subject, we might re-read "Earnings of Women Employed in Hotels and Restaurants" prepared by the United States Labor Department and reported in the *Labor Information Bulletin*, for August 1935. How do the hourly rates paid to women, as reported in this study, compare with the rates we pay our waitresses, maids, counter girls and other women employees? How about our hours of work? What of our policies concerning charges for uniforms, laundering and the like? Will the facts as given in the study show up as being "good labor standards?" And again referring to the same bulletin for October 1935, we might check the salary scale paid our institution bakers with that found to be the scale as reported in the bulletin.

It is true that good labor standards include more than wages paid and hours worked. What about working conditions, tools provided, lighting and ventilation? What about rest-room facilities? In short, how

good are we as employers, and as professional people are we contributing even a small part towards the solution of the huge problem of employment and employment conditions?—ANNA M. TRACY, *Chairman, Administration Section.*

Preliminary Program

Monday, October 12, 1936

9.00 A.M. REGISTRATION

11.00 A.M. GENERAL SESSION: Beula B. Marble, *presiding*
1. Dr. E. P. Joslin
2. Diabetic Clinic Demonstration

12.30 P.M. WELCOMING LUNCHEON: Octavia Hall Smillie, *presiding*
Dr. Charles Wilinsky

2.00 P.M. BUSINESS MEETING: Katherine Mitchell, President, *presiding*

8.30 P.M. EVENING SESSION—GENERAL INTEREST: Lute Troutt, *presiding*
1. Mrs. Miriam F. Skirball
2. Mrs. Mary P. Huddleson

Tuesday, October 13, 1936

8.30–10.30 A.M. DIET THERAPY ROUND TABLE, Committee Reports: Mary Harrington, *presiding*

10.30 A.M. GENERAL SESSION—DIET THERAPY: Mary Harrington, *presiding*
1. Dr. Chester Jones
2. Dr. Walter Bauer
3. Dr. George Minot

12.30 P.M. LUNCHEON: Heads of Home Economics Departments in Colleges and Heads of Approved Courses for Student Dietitians

2.30 P.M. GENERAL SESSION—PROFESSIONAL EDUCATION: Dr. Blood, *presiding*
1. Dr. Bancroft Beatley
2. Prof. Philip J. Rulon

4.30 P.M. TEA

6.00 P.M. DINNER: Directors of Approved Courses for Student Dietitians
VISITS TO FOREIGN RESTAURANTS
REUNIONS

Wednesday, Oct. 14, 1936

8.30 A.M. ADMINISTRATION ROUND TABLE, Committee reports: Anna M. Tracy, *presiding*

10.30 A.M. GENERAL SESSION—Administration: Anna M. Tracy, *presiding*
1. Prof. North Whitehead
2. Miss Ruth Scandrett
3. Mrs. Quindara Oliver Dodge

12.30 P.M. EXHIBITORS' LUNCHEON: Marietta Eichelberger, *presiding*

2.30 P.M. GENERAL SESSION:
1. Dr. C. Macfie Campbell
2. Miss Frances Stern and Clinic Demonstration

4.30 P.M. PROFESSIONAL EDUCATION ROUND TABLE: Kate Daum, *presiding*

7.00 P.M. ANNUAL BANQUET: Katherine Mitchell, President, *presiding*
1. Dr. Vilhjalmur Stefansson

Thursday, Oct. 15, 1936

8.30 A.M. COMMUNITY EDUCATION ROUND TABLE, Committee Reports: Lillian Storm, *presiding*

10.30 A.M. GENERAL SESSION
1. Mary DeGarmo Bryan
2. Dr. Augusta M. Bronner

12.30 P.M. AFFILIATION LUNCHEON: Lute Troutt, *presiding*

2.30 P.M. GENERAL SESSION, Community Education: Lillian Storms, *presiding*
1. Dr. Wilson G. Smillie
2. Mrs. Mary Swartz Rose

6.30 P.M. PUBLICITY DINNER: Edith Barber, *presiding*

—OCTAVIA HALL SMILLIE,
GERTRUDE SPITZ,
Program Chairmen

Scheduled Trips

Sunday, October 11

10 A.M. Historical trip through Old Boston —1¾ hrs.—$1.00.

2 P.M. Historical trip through Old Boston—1¾ hrs.—$1.00.

3 P.M. Short drive through Fenway to Mrs. Jack Gardner's palace, followed by tea at Simmons College. Transportation will be furnished.

Wednesday, October 14

6.30–8.30 A.M. Early morning trip to Fish Piers—$.50.

Friday, October 16

6–9.30 A.M. *Trip to Markets.* Visit fish markets, meat packing plant, Faneuil

Hall Markets. Inspect Birdseye freezing process—$.50.
Breakfast in downtown district.

6.30–7.30 A.M. *School Lunch Trip.* Visit Broadway Building, Women's Educational and Industrial Union (Walking distance). Food preparation—Headquarters of Boston School Cafeteria System.

8.00 A.M. Breakfast at Schraffts, 356 Boylston Street.

9.00–12. M. Visit Brookline—Newton and Boston School Cafeterias—$.50.

9.45–12 M. *Hospital and Commercial Trips* —each $.50. Choice of:

A. Children's Hospital
Peter Bent Brigham Hospital
Forsythe Dental (Food Clinic)

B. Beth Israel Hospital
Deaconess Hospital (Dr. Joslin's Clinic)

C. Massachusetts General Hospital
(Pay Cafeteria)

D. Massachusetts Memorial Hospital
City Hospital

E. Boston Dispensary (Miss Stern will welcome visitors every morning)

F. Harvard University Food Service

G. Filene's Restaurant (10–11 A.M.)

12 M.–6 P.M. To Wayside Inn for lunch "Old Grist Mill," "Mary's Little Lamb Schoolhouse." Visit Concord and Lexington.—Trip, $2.50. Lunch, $1.25.

1–6 P.M. To Marblehead and Salem. "House of Seven Gables," Pioneer Village. Tea at the Salem Hospital.—Trip, $2.00.

1–4.30 P.M. Historical Trip—Boston and Cambridge.—Trip, $1.50.

2.30–4.30 P.M. Trip around Boston Harbor (Weather permitting—wear warm clothing).—Trip, $1.00.

1.30–6.30 P.M. To Providence, as guests of Rhode Island Dietetic Association. Visit Tercentenary Exhibit—Museum of School of Design. Tea at Butler Hospital. Drive through Roger William Park.

Saturday, October 17

10.30 A.M.–6.30 P.M. To Gloucester and Cape Ann, Pigeon Cove, Rockport. Visit fish packing and lobster plant. Visit Gloucester Hospital (small hospital equipment). Tea at Gloucester Hospital.—Trip, $2.50.

10.30 A.M.—6 P.M. Historical Trip to Plymouth. Lunch at Toll House in Whitman.—Trip, $2.50.

Special Trips

Aeroplane trips over Boston and surrounding cities will be scheduled for definite times. Time and dates will be announced.

Tickets to broadcasting stations will be available at the Trips Booth for evening broadcasts.

If members are unable to arrange for the scheduled trips, special arrangements can be made at the Trips Booth. A schedule of hours when hospitals will welcome visitors other than Friday morning may be seen at the Booth. A representative of the Gray Line Bus Company will be at the Booth to make arrangements for all trips.

Note.—Please register early for trips.

Suggested Trips for the Week-End

(Arrangements may be made direct with the Gray Line Bus Company)

If the New England fall weather is normal, the beautiful colors of the foliage should be at their best during the week of the Annual Meeting. There is no better way to enjoy nature in full dress than to take a week-end trip through the mountains or along the shore.

The sublime beauty of the majestic White Mountains of New Hampshire, grouped around Mount Washington, 6000 feet above the sea level, can only be appreciated by a visit to that section.

Vermont, the State of Green Mountains, turned to scarlet and gold by Nature's paint brushes, is the beauty spot of America in October.

Visit the rock-bound coast of Maine. Drive over magnificant highways, through rolling country and along a shore dotted with islands, coves and inlets. If time permits, go to Arcadia National Park, the only National Park in the East.

Cape Cod with its sand dunes and its

great reaches of ocean views, its unique seaside towns and picturesque Cape Cod cottages, has a quaintness and charm all its own.

Motor over the Mohawk Trail to the Berkshires, the route originally followed by the Indians in King Phillip's time. The scenery is wild and beautifully wooded with an extensive view of the Catskills in New York, the Green Mountains of Vermont and numerous lakes and villages nestling in the valleys between.

The Exhibitors

American Home Economics Association. Visit our booth for the "old familiar" *Journal of Home Economics* and for other helpful publications. Newest among these are the 1936 bulletins, "Terminology Used in Food Preparation" and "Consumer Buying."

Batchelder & Snyder Company, Inc. Birdseye Frosted Foods, the most important recent development in the food industry, will be one of the outstanding points of interest at the Boston meeting. Birdseye meats were first produced in Boston at the plant of Batchelder & Snyder Company, Inc., in 1930. Since then fruits, vegetables, poultry and fish have been added. These products will be displayed at Booth No. 26.

Bay State Cereal Company. The dietitian of an important New England hospital phones us to say that patients leaving her hospital repeatedly inquired where they could buy Rollo Cereal. She was so pleased with Rollo that she invited us to exhibit at the Annual Meeting and recommended it to the committee on admission. Our modest conclusion is—get acquainted with Rollo.

The Chicago Dietetic Supply House. In Booth No. 6 we will show a complete line of unsweetened Cellu Fruit Juices as well as the Cellu Juice-Pak Fruits. To acquaint yourself with the new line of Fruit Juices, stop for a cool refreshing drink.

The Colson Corporation. The 1936 showing of the Colson line of food service equipment will include the Colson Tray Trucks, Dish Trucks, and quality Casters. Supplementing this equipment, the Swartzbaugh Food Conveyors and Utility Trucks will be exhibited. The Colson Corporation of Elyria, Ohio, has the exclusive national distribution for the complete Swartzbaugh line.

Cooperative G. L. F. Products, Inc. The exhibit of this Buffalo, New York, company will be built around the three Reinforced Milk Cereals—Milkwheato, Milkoato and Milkorno—developed by the College of Home Economics at Cornell. The exhibit will stress the value of these cereals for institutional feeding because of their economy and because of their increased food value due to the enrichment with dried milk products, that has increased the quantity and quality of the protein, increased the calcium and phosphorus, added lactose and balanced the vitamin B and G content.

F. A. Davis Company. The F. A. Davis Company is confining its exhibit to a display of *Food in Health and Disease*, by Katherine Mitchell Thoma, Director of Dietetics, Michael Reese Hospital, Chicago, and President of the American Dietetic Association. This text is rapidly taking its place as the leading text for nurses and student dietitians.

R. B. Davis Sales Company. You are invited to visit Booth No. 36. Not only will you be cordially welcomed, but you will be served delicious Cocomalt—*hot* or *cold*—as you choose. Come early—come often.

The Dubois Soap Company. The Du Boy Exhibit will be devoted to the presentation of useful, interesting, proven facts about K-O-L and will show how K-O-L Knocks Out or *dissolves* lime and magnesium in water and prevents formation of lime scale in machine, stain and discolorations on dishes . . . dull haze and grease film on glasses and silver.

Economics Laboratory, Inc. Economics Laboratory, Inc. will exhibit its three products. Soilax—a general purpose cleanser

of long standing reputation, particularly adapted to dish and glass washing where water is not excessively hard; Calgonite—the new super dishwashing compound, said to cope with the hardest water conditions, eliminating stains, filmy glasses, dull silverware. And Mikroklene—an ideal product for hand washing, which sterilizes effectively as it cleans, and contains Calgon for hard water.

M. F. Foley Company. Boston's Real Fish House, will have an unusual, attractive display showing map of entire New England coastline in beautiful oil painting with all respective fishing grounds marked off; also fish and shell fish done in their natural colors from this part of the country. The company anticipates having a very well known dietitian there and will either demonstrate the preparation of Sea Food or display fresh fish and also give out booklets.

The J. B. Ford Sales Company. Have you any questions about dishwashing or culinary cleaning? Are your dish machines free from scale? Call and let us tell you more about our chlorine germicide for glasses, dishes, raw vegetables, etc. To answer these and other questions about all kinds of cleaning operations, visit the Wyandotte Booth No. 37.

Fruit Dispatch Company. At Booth No. 16 you will find the latest information about bananas, and some exciting new large quantity recipes using bananas in many different ways. You'll want to try that refreshing banana milk shake again, too.

General Foods Sales Company, Inc. Visit General Foods Booths 22 and 23! Here you will find a display of Birdseye Frosted Foods and a representative from this division of General Foods who will be pleased to discuss the advantages of the various packs available for the institution market. There will be an additional exhibit of other General Foods products that are especially packed for the institution market, together with recipe and educational material. An assortment of this material will be sent to those who register at the General Foods booth.

Gerber Products Company. Gerber's Strained Foods for infant feeding and for special diets will be on display in Booth No. 30. There will be charts and illustrations of the Shaker-cooker method of processing. Gerber's have two types of literature, some for distribution to patients and some for professional use only. Samples of the foods and literature for examination will be sent to registrants at the booth.

Hawaiian Pineapple Company will exhibit the Dole Hawaiian Pineapple Juice, dispensing free drinks of ice cold pineapple juice at the booth. There will also be on display samples of our Dole Pineapple Products including our new Dole Royal Spears, our Dole Pineapple Gems, our Dole Sliced Pineapple, Dole Tidbits and Dole Crushed Pineapple. The Dole line of Pineapple Products is produced, packed and sold by the Hawaiian Pineapple Company, Ltd.

H. J. Heinz Company. H. J. Heinz Company, Pittsburgh, invites you to visit their display of Tomato Juice, Breakfast Cereals, and Strained Foods, prepared especially for infant and convalescent feeding. Register for the second edition of their *Nutritional Charts*. This revised edition, published in December 1935, contains along with the Vitamin, Mineral and Food Composition Charts, new sections on daily requirements and food allergy.

Hilker & Bletsch Company. At Booth No. 40, occupied by Hilker & Bletsch Company, manufacturers of Salad Bases, Dry Beverage Powders and Gelatine Desserts, we hope to have new combinations of salads for your approval. The booth will be attended by Bert Hennecke, Walter Stenken and Carl Hilker.

Horlick's Malted Milk Corporation, in Booth No. 28, will explain the special uses of Horlick's Malted Milk, natural and chocolate flavors, as a food of remarkably nutritive

and digestible qualities, both in sickness and in health. Samples of Horlick's Malted Milk Tablets will be distributed as a reminder of their usefulness as a pleasing variant in the liquid diet, and as a beneficial confection for children.

Irradiated Evaporated Milk Institute invites you to visit their exhibit in Booth 21. Information will be available on the enrichment of evaporated milk with vitamin D by means of irradiation (Steenbock process). Also available will be the results of clinical research in infant feeding and the nutritive value and many uses of the enriched milk. Dr. Marietta Eichelberger and Miss Millicent Atkin will be in charge.

Johnson-Appleby Company, now housed in its own modern plant on Memorial Drive, Cambridge, Massachusetts, has for twenty-nine years, under the same ownership management, been producing a unique line of table delicacies. Their products are known far and wide for their purity and excellence. At the forthcoming Annual Meeting in Boston they will occupy Booth 44.

H. A. Johnson Company. H. A. Johnson Company, Boston and New York, will exhibit at the October convention a complete quality line of canned goods, jams, jellies, marmalades and other specialty items necessary to successful menus. Their slogan "Canned Foods of Distinction always graded up to a Standard, never down to a Price" will be fully proved by their display.

Kellogg Company. Dietitians are cordially invited to visit the Kellogg booth for a refreshing cup of Kaffee Hag Coffee. The complete line of Kellogg ready-to-eat cereals and Kaffee Hag, together with the new institution file cabinet, are on display. Quantity recipes, special recipes for allergy diets, and general nutrition literature, are available. The booth will be in charge of Miss Mary I. Barber, Director of Home Economics of the Kellogg Company.

Sam'l B. Kirk. Jullicum Desserts, Easy to make, Easy to serve. In creating this new product for making rennet-milk desserts of delicious flavor, the objectives included Food Value, Taste, Rapid Preparation, Low Costs. Eighty years' experience manufacturing Shinn-Kirk Liquid Rennet (*Plain Jullicum*) crystallized into *Jullicum* in *Flavors*.

Kraft-Phenix Cheese Corporation. The Kraft-Phenix exhibit will feature the complete line of cheese and salad dressing products, and will include Kraft Dairy Fresh Caramels, Old English Toffee, and the most recent developments in whey powder products.

Libby, McNeill & Libby. Libby's Homogenized Foods. This new process mechanically ruptures the food cells of vegetables, fruits, and cereals, refines the cellulose tissue, releases the contained nutriment, and makes these foods more easy to digest and more completely assimilated. Photomicrographs of strained and homogenized foods graphically illustrate the advantages of the newer process. The Research Laboratories of Libby, McNeill & Libby invite you to inspect their display in Booth No. 1.

J. B. Lippincott Company. Of interest to dietitians will be Cooper, Barber and Mitchell's *Nutrition in Health and Disease*; Barborka's *Treatment by Diet*; Balyeat's *Wheat, Egg or Milk Free Diets with Recipes and Food Lists* including any combination of three; *The Family's Food* by Lanman, McKay and Zuill; *Food: Its Planning and Preparation* by Mabel T. Wellman; *Table Service and Decoration* by Lillian M. Gunn; *Institutional Household Administration* by Lydia Southard; and our full line of standard nursing texts.

The Macmillan Company invites you to visit its display of books on nutrition and allied subjects. We wish particularly to call your attention to our newest book in this subject, namely, *Prescribing Food: Practical Dietetics in Health and Disease* by L. Jean Bogert and Mame T. Porter. The sixth edition of the ever popular Proudfit *Nutri-*

tion and Diet Therapy and our new Sansum-Hare-Bowden *The Normal Diet and Healthful Living* will of course be among the books on display.

The Maltex Company, Inc. Maltex Cereal, a delicious wheat and barley malt product rich in vitamins and minerals, appears at the Convention again this year. Many institutions where rigid economy and high nutritive value must be carefully balanced, buy Maltex regularly. An interesting new folder of *Recipes for One Hundred Servings* is now available.

National Biscuit Company exhibit will afford visitors an opportunity to see, step by step, the making of that famous cereal—Shredded Wheat. A selected group of National Biscuit Company's 500 varieties of delicious, nourishing crackers will be on display. And as an added treat—Ritz, the world's most popular cracker will be sampled.

The E. L. Patch Company. Kondremul and Emulsion of Mineral Oil with Kaolin will be exhibited. These products owe their stability to the tough film formed by Irish Moss, the emulsifier. Their freedom from oiliness and their palatability can only be appreciated by tasting them. Gadoment, the cod liver oil ointment, will also be shown.

Alida Frances Pattee desires to announce her exhibit, Booth No. 41, will be occupied by the display of the New "20th Edition" of Pattee's Dietetics—Rewritten, Reset and Illustrated— Keep in Step with Dietetic Progress by using this new book, which gives the latest results of research in dietetics. This is an especially understandable class text.

Ralston Purina Company will exhibit Ry-Krisp, The Whole Rye Wafer, Ralston Wheat Cereal and Baby Ralston in Booth No. 35. Up-to-date information on the nutritional value of these products and their use in special diets will be available to all dietitians visiting the booth.

Ad. Seidel & Sons offer at their Booth No. 2 a novel display of tasty salads, attractive gelatine desserts, sparkling fruit jellies and refreshing fruit beverages. Being pioneers in the preparation of the highest quality food products in convenient dry form, they invite you to observe how simple it is to make so many appetizing dishes from various vegetables and fruits.

John Sexton & Company. Delegates are cordially invited to inspect the interesting display Sexton has prepared for them. Over fifty years' close contact with the leading hospitals and institutions of the nation is your assurance that such a visit will prove educational and time well spent. An added feature will be a display of the new type fruits packed in their natural juices—without added sugar or salt—for restricted diets, which are meeting with widespread approval.

Standard Brands Incorporated. New institutional recipes for Royal Gelatin Desserts and Royal Gelatin Aspic will be featured at the Standard Brands exhibit. Miss Doris Tisdale, Home Economics Director, will be in charge. The following Standard Brands products for institutional work will be exhibited: Fleischmann's Yeast-for-Health; Chase & Sanborn Dated Coffee; Tender Leaf Tea; Royal Baking Powder; Fleischmann's Baking Powder; Royal Gelatin Desserts; Royal Arrowroot Puddings; Royal Gelatin Aspic.

Stokely Brothers and Company, Inc. Stokely's Strained Foods for Baby—Vegetables, Fruits and Cereal—specially prepared from garden-fresh Stokely-grown vegetables, choice fruits and grains, by methods which retain natural flavor and food value in high degree. Correctly seasoned for absolute uniformity and protected in golden enamel lined cans—these foods have a natural delicious flavor that baby really likes. Visit Booth No. 4 and examine Stokely's Strained Foods products.

Tricolator Company, Inc. Tricolator—the improved filter drip coffee maker, eliminating the bag from the urn—made in

sizes from one cup to 150 gallons, to fit any urn in use or as a complete unit. Will meet any requirements that you may have for the brewing of unexcelled coffee. Special educational display of coffee filters for all types of coffee makers.

The Vitex Laboratories, Inc. of Harrison, N. J., will serve at the exhibit, Vitex Vitamin D milk produced by one of their 250 licensed dairies. This will provide dietitians and other visitors with the opportunity of tasting this extra-nutritional milk that contains 400 vitamin D units U.S.P. per quart—the actual vitamin D extracted from cod liver oil, and equivalent to the vitamin D of 1¼ teaspoons of U.S.P. cod liver oil.

The Wander Company announces that for several years Ovaltine has been fortified with vitamin D to the extent of 154 international units per ounce by the Steenbock Irradiation Process under license of the Wisconsin Alumni Research Foundation. Three heaping teaspoons of Ovaltine in a glass of milk used three times daily, provides 264 international units of vitamin D, as well as practically the full daily requirement of the important minerals, calcium and phosphorus, in proper ratio.

EDITORIAL

An Evaluation of the Teaching of Nutrition in Schools of Nursing[1]

"Broadly interpreted, the essence of nursing is the conservation of vital energy—the safeguarding and building up of the life forces in the individual and the race. This includes the nurture of both mental and physical energies and the creating of resistance and vigor in healthy and growing individuals". Outlining the progress in the teaching of dietetics to nurses from the six weeks' period of instruction in the 1890's, presided over by a "diet teacher", to the present proposed changes in the nursing curriculum, Dean Howell acknowledged the valuable assistance of dietitians in the work of the Central Curriculum Committee of the National League of Nursing Education. "These proposed programs are based on a plan for higher admission requirements in schools of nursing, one of the most forward looking steps in nursing today". This, with the ultimate goal of reorganizing schools of nursing under universities rather than under service agencies, should help to solve some of the difficulties in preparation for professional service in nursing.

The tentative outline on nutrition and cookery as proposed by the Central Curriculum Committee in its general recommendations, suggests a time allotment of 60 hours, divided into 15 one-hour classes in nutrition and 15 three-hour laboratory periods in cookery, to be given during the second term of the first year. "The instructor in charge of this course should be especially qualified as a dietitian and as a teacher. As a rule the hospital dietitian is the best person for the teaching of courses relating to nutrition and diet therapy, assuming that she has the necessary teaching qualifications". It is suggested that the teaching method consist of lectures, class discussions and laboratory work for the main part of this course, with conferences to meet the needs of individual students and demonstrations to accompany the class and laboratory work. Special emphasis should be given to those principles and procedures that will be of greatest value to the student as an individual, a nurse and a teacher of health. Although factual knowledge and manipulative skills are essential in student preparation, outcomes which are equally vital are an appreciation of the importance of nutrition in maintaining and promoting health, and ability to initiate constructive and purposeful activities in

[1] Abstract of paper presented by Marion D. Howell, dean, School of Nursing, Western Reserve University, Cleveland, before the American Dietetic Association, Cleveland, October 29, 1935.

relation to her diet and that of others. She should begin early to consider the entire dietary needs of individual patients.

The general data included in the tentative outline for diet therapy suggests a time allotment of 30 hours for classes and related laboratory periods, and 4 to 6 weeks for practical experience in the diet kitchen and ward during the third term of the first year. This course would be a continuation of nutrition and foods and is intended to correlate closely with medical and surgical nursing.

The above courses are not intended to include all the preparation which student nurses are expected to have in relation to diet in health and disease; in every clinical course it is assumed that the dietary treatment will be discussed in connection with each type of disease or condition and that the clinical experience will give the student an opportunity to apply these principles in the nursing of all types of patients. "Too much emphasis cannot be put on the fact that nursing and nutrition are inseparable if not actually identical and that in many conditions the nourishing of the patient is the most vital factor in the treatment".

Commenting on the number of failures of nurses in state board examinations, Dean Howell stated that the records of one state show 23 failures per 1093 applicants in 1928; 4 per 1132 applicants in 1929; 2 per 1451 applicants in 1923; and 11 per 1470 applicants in 1934. This might seem like poorer work in 1934, but it must be remembered that in 1934 the minimum passing grade in each subject was raised from sixty to seventy per cent and that the same changes would probably be found in other states, so that the figures mean little without the related data.

Schools of nursing have had exceptionally well-prepared teachers of nutrition and dietetics. From the very beginning, however, these teachers have had to carry heavy administrative duties, a fact which seems true of most teachers connected with hospitals. Perhaps in the future this situation can be remedied. ("The teacher of student nurses should be paid by the school of nursing when the school is a separate organization, and be given ample time for preparation. She should be a well-prepared graduate dietitian-teacher, not a student dietitian".)

Adequate teaching facilities should include well-equipped laboratories, clinical experience with ward and out patients, and enough time for both theory and practice. "The school of nursing should take the initiative in providing opportunities for close correlation with other clinical subjects and *share* with the dietitian and students in dietetics their valuable ward conferences, clinics, and demonstrations".

In conclusion, Dean Howell referred to the admirable progress made in

the dietitian's field—particularly in that of research—and the clever adaptation of these findings to the happiness and health of human beings. Dietitians "are building so sanely and surely by means of education". The nursing and dietetic professions have grown up together and have been mutually helpful. Difficulties encountered in the teaching of nutrition and diet therapy seem to have centered about two factors having the same source: "too little time allowed by the school for the teaching and too little time allowed by the department of dietetics to do the teaching—both dependent on hospital administration and financing."

Educational Trends in the Field of Dietetics[1]

From a broad perspective of over thirty years, for he gave one of the first courses in dietetics in this country in 1902, Howe gave his views on the subject of dietetics as a science and an art. When he began his work there were few textbooks related to dietetics that were worthy of the name. Practically all the emphasis was placed on sufficient calories and proper distribution of the fats, proteins and carbohydrates. Today vast additions have been made to our knowledge of dietetics but we have much to learn about many other phases of specific and general education.

In the first place, we have been more or less confused as to just what education really is and what constitutes an educated person. "Education directed solely toward highly specialized training in one subject is very likely to develop a narrow, opinionated person . . . unable to interrelate theory and practice."

The science of dietetics had to be developed before the art, in order to make the subject fundamentally sound. However, it is well to strike a warning note by pointing out and stressing "the importance of technique and our lamentable weakness on the art side." Aside from this, Howe believes that in the years to come character and personality will be stressed more strongly than ever before. "For a number of years this has been the first question asked of us by prospective employers, and leading dietitians are more and more emphasizing it." It must also be borne in mind that education is or should be a continuous process from the cradle to the grave, that no school or college can give more than a small part. The successful dietitian must learn how to interrelate theory and practice, as well as realize the importance of fine technique, even in the doing of simple humble tasks, for these "may be fully as educational and often more useful than the pursuit of some abstruse piece of research."

[1] Abstract of paper by Frederic W. Howe, Pratt Institute, and discussion by Mary M. Harrington, Harper Hospital, Detroit, presented before the American Dietetic Association, Cleveland, October 29, 1935.

In her discussion of Howe's paper, Harrington called attention to the three points which he mentioned as of particular significance: (1) the change in our concept of the subject of dietetics—so far-reaching that an enumeration of the responsibilities from the hospital point of view may be interesting; (2) "education is a continuous process"—a statement which needs to be ever before all of us, including every director of a student training course; and (3) character and personality are important factors in determining not only the emphasis of training but also the success in this particular field.

Dietetics has been defined by the Bureau of Vocational Information as the science of planning, calculating and preparing diets based upon a scientific knowledge of digestion, metabolism and excretion. Roberts' report on vocations, however, showed that while the detailed duties of the dietitian are largely determined by the individual institution, the group classifications are generally administrative and therapeutic, and conform to the responsibilities set up by the American College of Surgeons for this department. In Murtland's report, the nine duties most frequently mentioned are (1) planning menus and meals; (2) planning regular and special diets; (3) consulting with doctors on diet therapy; (4) preparing and serving food; (5) ordering and purchasing supplies; (6) hiring and supervising help; (7) keeping records and inventories; (8) teaching student dietitians and nurses; and (9) teaching patients, a newer innovation. Obviously, according to Harrington, the planning of diets and food preparation are only a small part of the comprehensive program of responsibilities that are delegated to the administrator of the dietary department.

A survey secured from 34 institutional dietitians listed the personality requirements essential to success as follows: ability to handle people, initiative, health, ability to analyze situations, capacity for hard work, self-confidence, tact, pleasing appearance, organizing ability, maturity, and enthusiastic ability in housekeeping. These points determine the trend of preparation and training which must be offered. We may well query: Are we asking the dietitian to be superhuman? The great problem of directors of college home economics departments and of hospital training courses has been the time required to give curriculum and training necessary for these varied responsibilities.

Courtis believes that education should not only be a continuous process but also a social integration, one that necessitates continual adjustmnet in terms of personality. Kilpatrick emphasizes that learning is not only creative but also personal, and it is such educators as these, according to Harrington, who make us ever conscious of two considerations—character

and personality. Glenn Frank speaks of the educated man as one "who has never stopped his pursuit of the flying goals of information and insight."

Harrington looks upon the dietitian in the institutional field as "one who inspires coördinated activity dependent upon progressive, well-adjusted personnel." The making of decisions, the understanding of the individual person and of the constant interactions between personnel and professional contacts are her responsibility. Such activities require a broad, sound, and fundamental knowledge based on scientific training, in order to provide the precision instrument for discipline and decision. The art or skill in the performance of these responsibilities can only be acquired by the student who has a thorough understanding of the group and the individual, and a developing social intelligence. "Training cannot be limited to a study of technique but is ever dependent upon a personal culture broad enough to meet demands of an extending scope and quality, a culture that develops a personality rich enough to respect each human being as a person, maintains an ideal of a moral obligation for progress and change, and places the interest of the group above the rights of the individual." Thus better professional achievement lies in an understanding and realization of the problems in diversified fields of endeavor. This promotes growth, social adaptation and social integration, with improvement not only in thought and action but also in self-realization.

CURRENT COMMENT

Revising the Constitution

The rewriting of the Constitution has been worked upon intensively for two years. The Revision Committee of 1934–35, under Mrs. Dodge as chairman, began the task and decided that there were so many inconsistencies and so many activities not authorized by the Constitution that a complete rewriting was necessary. The draft drawn up by that committee was discussed by the Executive Committee at the Annual Meeting in Cleveland in 1935 and the recommendation was made that it be presented to the incoming Executive Committee for further study. The 1935–36 committee worked over the original draft and recommendations of the 1935–36 Executive Committee, and presented its report to the Executive Committee at the mid-year meeting last winter. This final draft, as changed and approved by the Executive Committee, is being

presented to the membership to be voted upon at the Annual Meeting this fall in Boston.

It is the purpose of this presentation to point out briefly wherein the revised Constitution differs from the present one and the reasons for the changes.

With the growth in membership (now 3280) and variety of activities of the Association, the burden of responsibility upon the President has become very great. In an effort to relieve this burden somewhat, the President, according to the revisions, would be relieved of the chairmanship of three important boards, namely the Journal, Investigation and Placement Bureau Boards. Instead of the President serving as chairman, the senior member, who will have served several years on the board and therefore will be more familiar with its work than the President, will act as chairman and the President will be a regular member of the board. As in the past, the President with the approval of the Executive Committee will appoint new members of each board and of the standing committees.

The inspection of student training courses which has become such an important activity of the Association is not mentioned in the present Constitution. The revisions place the responsibility of this educational project upon the chairman of the Professional Education Section where it belongs. The chairman of this section may recommend the inspection chairman, but this appointment must be approved by the Executive Committee. Further procedure regarding inspection is left to the Executive Committee, since it is difficult to foresee all situations which may arise and an effort is made to leave the hands of the Executive Committee as free as possible.

The Finance Committee, consisting of the Treasurer as chairman, the President, President-elect, two other members appointed by the President, and the Business Manager, as an ex-officio member, has existed for two years, yet there is no mention of it in the existing Constitution. The function of this committee is to draw up a budget, scrutinize expenditures and advise the Treasurer and President on financial matters. Since our association does an annual business of approximately $32,000, this is a necessary and important committee and should be authorized by the Constitution, as provided for in the present revisions.

It has long been felt that some provision should be made to give the membership more active participation in the management of the Association. An effort to do this has been proposed in the revisions by the creation of a House of Delegates. Article II of the By-laws provides for

the organization and responsibilities of this body. "Each affiliated state association, in good standing, shall elect or appoint an active or life member to act as its official representative at the Annual Meeting. These representatives shall constitute the House of Delegates. The delegate must be an active or life member in good standing, of the American Dietetic Association, and of the affiliated state association represented." The complete article providing for this body was given in Katherine Mitchell's discussion of the Constitution in the March 1936 issue of the JOURNAL.

The only responsibilities given the House of Delegates are (1) to have a voice in selecting the place of the Annual Meeting and (2) to make recommendations to the Executive Committee regarding state associations' problems. While this responsibility is not great, the foundation of the organization is laid and later, after it is functioning and ready for responsibility, more can be added. A rapidly growing association, such as ours, needs more representation and as it continues to grow the need will be greater. The authority for making decisions is still left in the hands of the Executive Committee but opportunity is now offered for discussion and for an official channel of communication between the members and the Executive Committee.

The foundation of the House of Delegates rests upon Article IV of the Constitution. This reads: "Any state association of dietitians *whose active and associate members are all members of the American Dietetic Association may be affiliated subject to the approval of the Executive Committee.* This action shall become effective November 1, 1937." The present Constitution states that "State associations of dietitians *having the same qualifications for active membership* as those required by the American Dietetic Association may affiliate." Since the state members elect the representatives of the House of Delegates, it is obvious that all state members must be members of the national Association or we should have official delegates being elected by persons who are not members of American Dietetic Association. This provision may work a hardship on some state associations and a year is being given them to meet this requirement. It is felt that this provision will eventually result in strengthening the national organization.

Another provision of the new Constitution relates to the nomination of officers. In addition to the slate of candidates prepared by the Nominating Committee that will be published in the July issue of the JOURNAL each year, it is stated that: "Other nominations may be made by nomination petitions signed by not less than one hundred members of the Asso-

ciation, of whom not more than ten shall be from any one state, assented to in writing by the person or persons named therein as nominees, and filed with the Secretary at the office of the Association on or before the fifteenth day of August." The official ballot sent to the membership will contain the names of both groups of nominees. While this provision may never be used, it is substituted for the present clause permitting nominations at the business meeting that many of our members cannot attend.

It has been the effort of Miss Mitchell and the Executive Committee to give as much publicity and secure as much widespread discussion of the proposed revisions as possible. In addition to the intensive work of two successive Revision Committees and two successive Executive Committees, Miss Mitchell has made every effort to inform the membership regarding the revisions. A five-page article was published in the March JOURNAL in which Miss Mitchell explained the constitutional revisions in detail. She sent a more detailed letter to the presidents of all affiliated states asking that the matter be discussed at the state meetings and that she be informed of any criticisms or objections. She has attended a number of state meetings in person, at which she discussed the revisions in order to obtain as far as possible the views of the membership on the subject. After this widespread publicity there have been no serious criticisms or even suggestions; the Revision Committee therefore believes that the new Constitution represents the views of the majority of the members of the Association. It will be presented at the annual business meeting in Boston in October as a completed work to take the place of the Constitution now in force.—ELLA M. ECK, *Chairman, Revision Committee.*

A MODERN EMPHASIS ON THE TEACHING OF NUTRITION[1]

The first dietitian, I believe, was appointed at the Philadelphia General Hospital in the late 1890's to teach student nurses cookery for invalids. Today the dietitian is still expected to instill the fundamental principles of food preparation into the sometimes resistant minds of her pupils. The presentation of nutrition as part of the nurse's equipment, however, has come to include much beyond a knowledge of cookery, important as that will always remain.

The forces that have contributed towards this are several. State nursing laws now require that student nurses shall have a varying but

[1] This, and those following by Nelda Ross and Dorothy De Hart are summaries of discussions presented before the joint meeting of the Hospital Conference of the City of New York and the Greater New York Dietetic Association, Mt. Sinai Hospital, January 10, 1936.

prescribed number of hours in the subject of nutrition. Knowledge of food and the food needs of the body is increasing rapidly. Good nursing care includes understanding and application of these newer principles. We have in our hospitals daily proof in patient after patient of the havoc wrought by inadequate diet over a long period of time. Not only does the knowledge of normal nutrition apply to the general dietaries, but a therapeutic diet is no longer considered acceptable, unless used for a very short period, if it cannot fulfil the standards of a normal adequate dietary. Diet therapy itself has grown into a large and fascinating field far removed from the confines of diabetes, nephritis, and gastric ulcers. Schools of nursing today are emphasizing the nurse's responsibility in the growing field of public health, and here too a sound knowledge of nutrition is essential. The nurse relieves the sick, but it is also her job, whether in the private family or in the district, to teach prevention of illness.

In presenting nutrition, we should keep these facts constantly in mind. Surely the nurse must know how to cook simple dishes; but she must also know how to teach Johnny's mother the method of cooking spinach in a short time, using a small quantity of water, which may decrease Johnny's aversion to the mess his mother has served him hitherto. She must be able to judge whether the family is adequately fed, even when the individual foods used are strange to her. As dietitians, we have had to learn that the Italians substitute cheese for milk quiet successfully, and we can prepare the student nurse so that she will not repeat our mistakes in her contact with patients and families. Besides cooking, then, the nurse must have an intelligent appreciation of the diet needs of the body and the foods that supply these, and this should be translated into simple and easily remembered terms. With a sound knowledge of normal requirements, therapeutic diets no longer seem to be something remarkable, learned with difficulty and forgotten quickly; such a diet is merely a rational alteration of food intake to suit a particular disease, and at the same time is an application of the principles of adequate nutrition.

As with the student nurse, so with the medical student. In his equipment he has a far better theoretical background than the dietitian, but in his practical application there are sad gaps. Is it not time that the physician, confronted constantly with dietary problems, learns to talk in everyday language rather than in an offhand and vague manner, his instructions often having little if any relationship to the patient's dietary habits, or financial or social circumstances?

How then shall we teach this multiplicity of material, so necessary to

good health and so easily overlooked in the more dramatic episodes in a hospital? The classroom is a practical place for the teaching of theory at the present time. There we can present our subject in positive terms and point out principles to be absorbed. But, as in all learning, the confronted problem itself is the best teacher. Superimposed on classroom theory should be guided work with the patient. This is the time to reiterate and point out facts, familiar enough to ourselves, until they are also familiar to the student, and to elaborate on the dogmatic statements of our theories and allow the patient himself to present the obstacles and difficulties in the way of his attainment of good dietary care.

Granted that this additional teaching is of the utmost value in correlating nutrition as part of good nursing care, what are some methods of attaining this standard? There are several well-tried plans that come immediately to mind. One is the group conference where several students present the various aspects of a given disease in a single patient. Another is the nutrition case study, often carried out by the student in her diet kitchen service. To this, I would like to add still more. Since nutrition is a problem which confronts the individual in his three meals a day, why cannot the nutritional aspect be considered in every study the student makes throughout her three years of schooling? This would include her associations on adult medical and surgical wards, with emphasis on the normal adult diet and therapeutic diets based upon it; her work with children and with pregnant women, giving her an opportunity to teach; her work with a public health agency, making her acquainted with budgeting and low cost foods; and finally, if possible, practice in an out-patient nutrition clinic to sum up her experience. In this way we shall turn out nurses who are properly equipped to cope with the problems of teaching adequate nutrition whether they do private duty, administrative work, or join that large army of public health nurses who are doing so much to drive out disease and the predisposing factors to disease, one of which is malnutrition.—HENDERIKA J. RYNBERGEN, *Instructor in Nutrition, New York Hospital School of Nursing, New York City.*

TRENDS IN DIET THERAPY IN THE HOSPITAL

The general trend in diet therapy should be considered both in the content and the service of the therapeutic diet. The majority of hospital patients are on normal diets. The therapeutic diets are but simple modifications of the normal. Expensive and out of season foods are no more necessary on the therapeutic than on the normal diets.

A high caloric or reducing diet can be served from the ward pantry by

simple substitutions or additions to the regular normal diet. The ambulatory ulcer diet can be served by modifications of the soft diet. This viewpoint has led hospitals to install dietitians in the wards where they may supervise the service of food to patients on normal as well as on special diets. The dietitians order prepared food from the kitchen, visit patients, supervise maids in ward pantries and instruct student nurses in practical diet therapy.

The advantages of such a plan are numerous. Greater interest is is shown by the student nurse since she is able to see the direct application of principles of diet therapy to patient. More satisfaction is noted among patients since those on normal diets are also visited by dietitians and their preferences followed when possible. The dietitian can often satisfy a patient by inexpensive substitutions. Nurses are glad to turn over the feeding problem to the dietitian so that they may have more time for nursing duties and supervision. There is more economy in the use of supplies and better control of waste, since it is the dietitian whose department is responsible for the food and supply budget. There is greater economy in labor since much of the food can be prepared in the main kitchen and served from ward pantries instead of being specially prepared and delivered in diet kitchen carts. More patients can receive individual attention. Formerly, a diet kitchen served about fifteen per cent of the total patient census. With ward dietitians, we are able to serve about thirty-five to forty per cent with modified diets, not including liquids or softs.

The diet kitchen thus becomes chiefly a producing unit. In some hospitals it is retained as a separate unit responsible for a few diets. In others, a part of the main kitchen takes over the preparation of food formerly prepared in the diet kitchen.

The normal diet in the hospital is practically the same as a normal diet outside a hospital. The patient who receives a therapeutic diet also receives a more liberal one, since his diet is a modified normal. He is taught to select his food from the family menu with necessary additions or substitutions. He is taught that a special diet is not necessarily more expensive than the normal, since he may eat many of the foods eaten by the other patients as well as his family. No more do we give the special diet patient broiled chicken and strawberries, while the other patients have pot roast and plain apple sauce.

I believe that this service can be rendered better by dietitians who are on the wards and in constant association with the patients' nurses and

doctors, rather than by the remote control of dietitians in diet kitchens where they lack intimate knowledge of the patients' needs, have little contact with the medical and nursing services and therefore can but inadequately control the food situation.—NELDA ROSS, *Presbyterian Hospital, New York City.*

TRENDS IN DIET THERAPY IN THE CLINIC

Clinics are increasing their demands on the services of the dietitian because physicians are using more diet therapy in treatment and also because the increase in the number of clinic patients has made it impossible for the physician to spend time giving diet instructions.

The dietitian can make the work of the clinic more effective. She secures better coöperation between patient and doctor; interprets special diets in terms of the patient's environment; budgets the family income in order to obtain the necessary foods for the patients; gives special instructions on how to prepare food; teaches normal nutrition; and gives general health instruction.

In the clinic, dietitians conduct cookery classes giving practical instructions in the preparation of food. In the pediatric clinic they give information to mothers on how to feed children.

Too often diets are handed to patients simply with the request that they be followed. The dietitian is needed to explain the diet and make it suitable to meet the patient's level of income. In order that the Emergency Home Relief Bureau could get better coöperation from the physicians and clinics in New York, a group was organized in October, 1933, to study the situation. This group, with the approval of the Committee on Public Health Relations of the New York Academy of Medicine, published *Special Diets at Low Cost.* This pamphlet helped the patient to map out special diets so that other members of the family would not need to go short of food to provide for the special diet. Patients were better able to follow the diets that were also intended to assist the physician in ordering a diet to meet the patient's need. When these pamphlets are dispensed by the dietitian it is possible for her to make necessary changes and give instructions so that the diet can be followed.—DOROTHY DEHART, *Dietitian, Roosevelt Hospital, New York City.*

Feeding the National Guard[1]

How can the ravenous appetites of several hundred healthy, energetic young Americans, doing manual labor and living in the open air, be satisfied? There are many problems but foremost is that of personnel. It is extremely difficult to secure trained and experienced cooks and hold them from year to year through the armory drill period. Enlisting civilian cooks on the basis of references alone is most unsatisfactory, and it must be remembered that once cooks are enlisted by an organization, they are there to stay for the entire camp period since their places cannot be taken by others should they be returned to the ranks for any reason. It is even more difficult to secure mess sergeants with sufficient training, knowledge of food preparation and executive ability to handle a mess. A National Guard mess officer must depend on the ability and coöperation of his commissary and mess sergeants because, unlike the duties of an institutional or commercial dietitian, mess duties are only one of several functions this officer is called upon to direct.

Consider the requirements for operation of one of these messes: first, planning menus for two weeks; second, contracting for all foodstuff in advance; third, arranging delivery dates for quantities of all items, from salt and pepper to beef carcasses; fourth, running the messes on a very limited ration allowance; fifth, cleaning up, as far as is humanly possible, every scrap of food with none left on the last day of camp; and sixth, organizing the personnel of the several messes, made up largely of inexperienced and untrained men who have never worked together before, into smoothly running units. Thus the problem of the mess officer is far from simple.

With the assistance of an experienced, regular army mess sergeant from the School for Bakers and Cooks attached to the army post where the encampment was held, the first year went fairly well, although both the preceptor and his protege developed some gray hairs in the interim. Despairing of securing adequately trained mess sergeants, the mess officer determined to acquire well-trained chefs for the next year's mess. This helped somewhat, particularly in the quality of food served, but did not insure adequate mess administration, discipline or property responsibility.

Early in the spring of 1935 a School for Mess Sergeants was started

[1] Lt. Welch is an associate member of the American Dietetic Association and for the past three years has been mess officer for the Anti-Aircraft Division, 202nd Coast Artillery, Illinois National Guard. He is a graduate of the Hotel Administration Course at Cornell and has had fourteen years' experience in commercial food service.

within the regiment. The curriculum included: (1) foods—elementary composition, methods of preparation, use of left-overs and methods of avoiding waste; (2) menu planning—the balanced menu, determination of daily requirements and ordering; (3) administration—organization of personnel, division of labor, handling of cooks and kitchen police, and supervision of service; and (4) accounting. Simplified forms were developed for an elementary system of food control and with property responsibility assigned clearly to mess sergeants. The course was conducted by the mess officer on the lecture and quizz basis. In addition, the following lectured on special subjects: Captain Paul Logan, assistant commandant of the Quartermaster Subsistence School, "Balancing the Menu"; Inez Wilson, National Live Stock and Meat Board, "Meat Selection and Cookery"; F. O. Washam, director of school lunchrooms for Chicago, "Kitchen Management"; and Captain Elmer K. Pettibone, Subsistence School, "Faults Found in Messes and How to Correct them."

The course developed a high degree of interest among the mess sergeants and results were immediate. The organization, which previously had not been running smoothly even at the end of the first week, was perfected in two days. In fact, an excellent meal was served within three hours of arrival at camp, starting from scratch with locked mess halls and cold (coal) ranges. So successful was this school that a more advanced one was conducted during 1936. M. Faith McAuley was to address the class on menu planning and other dietitians, as well as instructors from the Subsistence School, were to assist. Here is a real opportunity for dietitians to render a patriotic service, and to learn something of the problems of the National Guard units in each community.

Unfortunately, not all mess officers have had the advantages of food service training. A few probably know the difference between a calorie and a vitamin but most of them are either lawyers, brokers or engineers in civil life. In an emergency, when millions of American men are hastily formed into units in which not one officer in a thousand has any conception of quantity food service, the problem is staggering. The Army School for Bakers and Cooks and the Quartermaster Subsistence School would be a revelation, even to the dietitian, because of the scope and quality of the work. However, the number of trained men graduated from these courses would be inadequate in a national emergency and this situation should be of interest to members of the American Dietetic Association.—J. M. WELCH, *1st Lieutenant, 202nd Coast Artillery (A.A.)*.

Class Instruction for Clinic Patients

Our decision in favor of class instruction brought about a surprising response and aroused enthusiasm seldom encountered with individual instruction. The results can probably be attributed to the psychological stimulation of group action. The classroom encouraged sociability as well as competition. No attempt was made at color segregation and in the first group all had one common interest—each was a diabetic. It was interesting to watch their adjustment to the classroom idea. Many came early and chatted away during the intervening time; except for the presence of a few men, any one looking in would have thought it was a ladies' aid society meeting.

The first series of classes for diabetics had an average attendance of 43 and a total enrollment of 93. Before admission, each patient had been given individual instruction in which he was advised that a thorough understanding of his diet, essential to his health and happiness, could be accomplished best in organized classes where he would meet others with the same problem—that of adjusting diet and life to the diabetic regime.

The patient was then given a card admitting him to the clinic, on which were printed the dates of the classes. This information was also mimeographed on one cent post cards for mailing. On admission to the food clinic the card was punched by one of the nurses and returned to the patient.

At the first meeting a staff doctor from the clinic gave a short talk, explaining the purpose of the class. In a later class period a group of diabetic children who had had previous training over a period of years conducted the class by demonstrating the use of insulin, the test for sugar in the urine, and answered questions asked by the dietitian. This aroused considerable enthusiasm and interest as most of the patients felt that if the children could learn so could they.

Lecture-demonstrations followed, comprising a study of the normal diet, and the administration of insulin. The dietitian illustrated her lecture with the aid of a blackboard, charts and food portions. Five or ten minutes were usually devoted to a review of the previous lesson. As might be expected, there were some who wanted to respond to every question, while the more timid remained silent. Usually, however, all had studied their lessons and were eager to display their knowledge. At the end of the class each tested his own specimen of urine and recorded the results in a notebook.

The last day of class was made a gala occasion. The food clinic was bedecked with flowers and a large table with a floral centerpiece dis-

played samples of sugar-free beverages, candies, gum and wafers. This was an innovation since an effort had been made to teach each patient to use ordinary foods. It helped, however, to create a party atmosphere. The festivities ended with the dietitian giving each patient a booklet containing an outline of the subject matter covered.

The next class experiment was with a group of obese patients, jokingly called the "200 Club" as the majority weighed over two hundred pounds. An average of 34 attended each class in this series, with a total enrollment of 55. The procedure followed was quite similar to that of the diabetic classes except that the group was divided into relief and non-relief patients as the classes would have been too large without some division. Each patient had a graph chart prominently displayed. The nurses weighed the patients on arrival and recorded this on the charts. The average weight loss for the series was 1.2 pounds a week. One patient who tipped the scales at 270 pounds shortly before the classes started lost 95 pounds and is now maintaining her weight at a normal level.

In both the diabetic and weight reduction classes, emphasis was placed on low cost foods to meet the economic status of the patients. A student dietitian and two nurses assisted in conducting the classes.

At present, classes are also being held three times a week for prospective mothers and nutrition classes for children are to be organized.

The success of any undertaking depends largely upon the enthusiasm and imagination with which it is approached, particularly when dealing with human personalities. For those who have an indifferent attitude toward diet and health, the classroom is a great help in stimulating and maintaining interest. But there are other factors which make classroom teaching worthy of consideration. Individual instruction is time-consuming and costly. With hundreds of patients to be interviewed, the time allotted to each is not sufficient and many times only the most essential points can be stressed. With a group, the dietitian can outline her lessons, discuss them in consecutive order and bring in many details and observations that individual instruction would not permit. The value of the association of one diabetic with another seems to have been advantageous. The doctor is also assisted when his patients have had group instruction as he knows just what they have been taught and what he can expect from them. If he has any particular message to impart, this can be done most expeditiously in the group meeting.—FRANCES BERKELEY FLOORE, *Director of Dietetics, St. Luke's Hospital, Chicago.*

Charts to Simplify Diabetic Diets

In teaching diabetic patients the tendency is more and more to avoid the use of weighed diets and to use instead diets in which approximate weights and measures are used. Particularly is this true in clinics and dispensaries where the cost of scales is an important item. Therefore the Flitcroft charts,[1] comprised of 3 charts showing the various common foods in the carbohydrate, protein and fat groups, drawn according to actual size, each having a like content of C. P. and F., are a valuable assistance in teaching patients. They are useful in teaching both classes and individuals since they are well organized, simple, easily understood, and vividly portray the important features of food selection and substitution. By using the ordinary foods common to most people, the charts lend themselves to use among any class of hospital or clinic patient.

Such charts can be used to advantage in teaching the classification of foods into carbohydrates, proteins and fats more effectively than material in spoken or written form. How to make substitutions in the diabetic diet is clearly shown in the drawings of average servings of the common foods in each group and their equivalents. Since substitution is what makes the diabetic diet interesting, this is an essential point to teach the patient.

The charts may be used effectively in numerous ways, either in their original, uncolored form; colored with crayons or water colors, shellacked, and mounted on stiff cardboard; or cut into strips horizontally, showing the substitutions individually, so as not to confuse the patient. They may also be colored and then cut into individual forms and mounted on a block of wood so that the food drawings may be presented standing upright.

Real lumps of sugar may be used to show the sugar value of the various foods. The charts are especially useful in an institution where there are no wax food models. Even if real food is used, this is not available at all times, but the paper models are always at one's service.

There is ever the controversy over weighed versus measured diets. Each method has points in its favor, but why be a slave to scales when the figures for food analyses cannot be entirely accurate? One crop of California oranges may contain a higher percentage of carbohydrate than a crop from Florida during the same season. Will the person weighing the orange take this difference into account? Of course not; then why be so dogmatic about weighing?

[1] These may be obtained on application to Lister Bros., East 42 St., New York City.

Similar differences may occur in other foods. If the diets are simple and conform to the normal diet as much as possible, the diabetic should be able to sit at the table at meal time and know his diet so well that he can take the correct amounts of the foods allowed him and remain an ordinary member of the family group instead of being set apart by having specially weighed food put before him. The diabetic should look upon himself not as a patient, but consider himself to be like anyone else except that he is on a diet.

The diabetic does not have to contend with his condition for just a week, a month or a year, but for many years. Therefore why not make his lot as normal as possible? He should know his diet and substitutions so well that he can sit at anyone's table as a guest, comfortable in the knowledge that other guests need never know he has diabetes. If the diabetic is at all socially inclined, and if the diet is taught in a common sense way, he will usually follow it. If difficulties are put in the way, such as insisting on the use of scales and minute calculations of each day's diet, most people will be inclined to break their diet. Which, therefore, is the more logical method? The writer prefers the more practical one, thus keeping the diabetic happy and contented. And for simplifying instruction the Flitcroft charts are a decided help.—SARAH ELKIN, *Mandel Clinic, Michael Reese Hospital, Chicago.*

FACTORS INFLUENCING THE VITAMIN C CONTENT OF VEGETABLES[1]

Spinach, peas, cabbage, and tomatoes have been found to be excellent sources of the antiscorbutic vitamin. String beans and rhubarb also contain considerable amounts. Certain varieties of tomatoes, peas, and spinach are particularly high in the antiscorbutic vitamin. The fact that certain varieties of tomatoes contain fifty per cent more vitamin C than others, indicates clearly that packers of this juice should give more attention to the varieties grown. Canners of spinach attempting to obtain a canned product of high vitamin C potency should consider not only the variety, but also the season, and the soil on which their raw material is grown.

Maturity has also been found to be an important factor affecting the vitamin C content of tomatoes and peas. Fully ripe tomatoes were nearly twice as high in the antiscorbutic vitamin as green tomatoes. As green peas mature, the percentage of this vitamin decreases, probably

[1] Abstracted from a paper read by Donald K. Tressler, M.D., N. Y. State Experimental Station, Geneva, before the Rochester Dietetic Association, April 23, 1936.

because of the rapidly increasing dry matter content. Small peas, in general, were found to be much richer in the antiscorbutic vitamin, thus justifying in part, at least, the higher price ordinarily obtained.

Since certain vegetables lose half their vitamin C content when held at room temperature for three days, and since the rate of loss is much lower when they are refrigerated, the necessity for prompt cooling, except for the more acidic vegetables such as tomatoes and rhubarb, is obvious if their full nutritive values are to be retained.

Of still greater significance from the standpoint of public health, are the observations, contrary to general belief, that but little vitamin C is destroyed during cooking. It is probable that this idea became prevalent because but few nutritional investigators took into consideration the amount of this vitamin which is dissolved in the water during cooking. In the case of small vegetables such as peas and cut snap beans, one-third or more of the total antiscorbutic vitamin passes into the water. The fact that the water, in which vegetables rich in vitamin C have been cooked, may be as rich in this vitamin as tomato juice, is of great importance. It is evident that methods of cookery should be adopted which will make use of this nutritionally valuable substance, too often discarded.

CURRENT LITERATURE

American Journal of Digestive Diseases and Nutrition

Vol. 3, June, 1936

*Ketosis as measured by the ketonemia following fat ingestion by obese and non-obese patients. E. L. Keeney, J. W. Sherrid and E. M. MacKay.—p. 231.

*Is gastric secretion or digestion impaired by a mixture of carbohydrate and protein in the diet? H. Shay, J. Gershon-Cohen and S. S. Fels.—p. 235.

Vol. 3, July, 1936

*The gastro-intestinal symptoms in hypertension. S. K. Robinson.—p. 296.

*Clinical aspects of vitamin B complex deficiency in association with disease of the gall bladder, report of an instance. G. H. Weller, Jr.—p. 324.

*Selenium-toxicosis: the etiologic or causative factor in pellagra. R. de B. Barondes.—p. 330.

KETOSIS AS MEASURED BY THE KETONEMIA. The degree of ketonemia is a better measure of the degree of ketosis than is the ketonuria. Following a fat meal, the ketonemia is generally higher in obese patients than in the non-obese. Overweight subjects are generally found to have fatty livers at autopsy. This may be caused by insufficient diet preceding death. Fat tolerance tests do not aid in the diagnosis of pituitary disease.

EFFECT OF CARBOHYDRATE AND PROTEIN ON DIGESTION. Studies were done on five individuals, free from any gastro-intestinal disease, to test the validity of claims made that mixtures of protein and carbohydrate interfere with gastric digestion. Results indicated that carbohydrate digestion in the stomach is actually prolonged and encouraged by its mixture with protein. This is probably brought about by the more favorable reaction for continued ptyalin activity in the stomach as a result of the acid-combining power of the protein.

GASTRO-INTESTINAL SYMPTOMS IN HYPERTENSION. The gastro-intestinal symptoms accompanying hypertension are to a considerable extent conditioned by the cardiovascular, neurovegetative, and other phenomena concomitant with the hypertension.

VITAMIN B-COMPLEX DEFICIENCY. A case of vitamin B deficiency in association with disease of the gall gladder is presented. In the presence of infection, coincident with the increase in general metabolic processes, it is evident that the demand upon vitamin B substances will be increased. Etiological factors may obscure gastrointestinal symptoms as a manifestation of vitamin B deficiency. However, characteristic skin manifestations coincident with marked increase in the gall bladder infection indicate the increased demand upon vitamin B substances.

SELENIUM-TOXICOSIS. The rather poor showing of vitamin therapy in pellagra would point to a cause other than one of nutritional deficiency. The striking resemblance between the symptoms of pellagra and selenium poisoning gives reason to believe this disease is the result of a similar poisoning. Chemical examination and spectroscopic analysis of foods and soils in pellagrinous districts to determine the presence of toxic substances would safeguard public health within areas affected.

American Journal of Diseases of Children

Vol. 51, June, 1936

* Metabolism of adolescent girls: III. The excretion of creatinine and creatine. C. C. Wang, I. Genther and C. Hogden.—p. 1268.

*Respiratory metabolism in infancy and in childhood: XVII. The daily heat production of infants—predictions based on the insensible loss of weight compared with direct measurements. S. Z. Levine and M. A. Wheatley.—p. 1300.

*Growth of Oriental children in San Francisco: A contrast. M. I. Preston.—p. 1324.

*Essential xanthomatosis: Treatment with cholesterol-free diet in two cases. W. M. Sperry and B. Schick.—p. 1372.

METABOLISM OF ADOLESCENT GIRLS. The average creatinine coefficient of twenty-three adolescent girls between the ages of 12 and 15 years was 22.8 mg. Creatine was excreted by all of the girls, varying from 3.5 to 19 mg. per kilogram of body weight.

RESPIRATORY METABOLISM. Under fixed conditions of diet, the nitrogen excretion of three normal infants was found to be an accurate measure of the protein catabolism.

GROWTH OF ORIENTAL CHILDREN. Measurements were made of the stature, weight and bicristal diameter of 740 Japanese and 391 Chinese children. Chinese children show the expected effects in health, growth and development of the unfavorable social-economic situation of this race in San Francisco. Japanese girls were superior to Japanese boys in weight, pelvic width, stature, arm fat and in the amount of abdominal fat.

XANTHOMATOSIS. The results of treating a child suffering from essential xanthomatosis with a cholesterol-free diet had no definite effect, either on the hypercholesteremia or on the clinical picture of the patient. All patients with essential xanthomatosis should be treated with a cholesterol-free diet, since a certain number may be expected to react favorably.

American Journal of Nursing

Vol. 35, June, 1936

*Vitamin D milks. J. A. Tobey.—p. 576.

Vol. 35, July, 1936

Celiac disease. W. W. Barber.—p. 660.
Celiac disease: Story of a patient. B. E. Rich.—p. 668.

VITAMIN D MILKS. Numerous clinical tests have demonstrated that irradiated and metabolized milks will protect the average infant against rickets when the usual formulas are prescribed. Development and use of the ultraviolet recording meter offers a valuable method of control of potency of irradiated milk during the process. The rat unit system of designating vitamin D potencies is misleading and erroneous.

American Journal of Public Health

Vol. 26, July, 1936

*Vitamin D in child health. F. O. Tanney.—p. 665.

VITAMIN D AND CHILD HEALTH. The public health importance of rickets lies in its contributory relation to the infections of childhood such as measles, scarlet fever, whooping cough, and diphtheria. Definite conclusions regarding the efficacy of vitamin D milk are not yet possible.

American Journal of the Medical Sciences

Vol. 191, June, 1936

*The interrelationships of the glands of internal secretion concerned with metabolism. C. N. H. Long.—p. 741.
*Studies in diabetes mellitus. IV. Etiology. E. P. Joslin, L. I. Dublin and H. H. Marks.—p. 759.

Vol. 192, July, 1936

*On the existence of an intrinsic deficiency in pellagra. A preliminary report. V. P. Sydenstricker, E. S. Armstrong, C. J. Derrick and P. S. Kemp.—p. 1.
*Studies in diabetes mellitus. IV. Etiology. E. P. Joslin, L. I. Dublin and H. H. Marks.—p. 9.

GLANDS OF INTERNAL SECRETION. The hypo- or hyperfunction of a particular hormone may so alter the metabolic background of the organism that the secretions of other endocrines produce an abnormal effect. For instance, the blood sugar responds to insulin or epinephrin in hyperthyroid states. The dysfunction of one endocrine organ brings about changes in the secretory activity of one or more other endocrines. The anterior pituitary appears to play a dominant rôle in the endocrine system.

DIABETES MELLITUS. Heredity, obesity, arteriosclerosis, gall bladder disease, nervous strain, pituitary disease, thyroid disease and other conditions enter into the etiology of diabetes. Jewish patients develop diabetes relatively early. The incidence of diabetes is higher in married than in single women.

INTRINSIC DEFICIENCY IN PELLAGRA. Six cases of pellagra treated with gastric juice in varying amounts given over periods of 10 to 49 days made an unusually rapid recovery. There may be an intrinsic factor present in normal gastric juice which makes possible the utilization of minimal amounts of extrinsic factor (B_2).

STUDIES IN DIABETES MELLITUS. A group of 6357 diabetic patients and 463 diabetic children is described, together with an analysis of various etiological features of the disease. Occupations were diverse, but there

was a rather large proportion of officials, managers and members of professions. Most patients were first examined because of symptoms of diabetes, but 12.6% of the males were first recognized as a result of examinations for life insurance. Since 1922 the number of females has exceeded the number of males. The number of cases increased steadily from infancy to a maximum at ages 50 to 54, except for a slight dip in the late teens, and dropped rather sharply from the peak in old age. The height of diabetic children at the outset tends definitely to be above average, but there is a normal distribution of height of diabetic adults.

Annals of Internal Medicine

Vol. 9, June, 1936

*Disturbances of the endocrine balance and their relation to diseases of metabolism. C. N. H. Long.—p. 1619.

ENDOCRINE BALANCE AND METABOLISM. The clinical condition that follows hypo- or hyperfunction of an endocrine organ is not merely due to the loss of that particular internal secretion. Instead, it is a result of the disturbance of the normal hormonal equilibrium of the body. The anatomical and probably the functional integrity of most endocrine organisms is dependent upon the anterior pituitary. A better understanding of the diseases of metabolism can be reached by regarding them as being closely interrelated to the organs of internal secretion.

Archives of Pediatrics

Vol. 43, June, 1936

*Effects of the oral administration of pituitary extract. L. A. Lurie.—p. 379.
*Depression children. I. Newton Kugelmass.—p. 386.

PITUITARY EXTRACT. Two cases of dystrophia adiposogenitalis, adolescent type, were fed pituitary extract by mouth. Both boys lost in weight and their desire for food returned to normal. Pubertal changes were brought about and they became mentally more alert.

DEPRESSION CHILDREN. Economic strife makes or breaks beings. Old folks bear the strain better than the young and children are eventually destroyed. Six million children are already scarred in the struggle. The new-borns are feeble; the infants are still strong; the children are stunted; the adolescents more sophisticated. Physical deprivation at one age leads to mental distortion at another. The birth rate has shown its characteristic increase during troublesome years. Births are prolific among the "depression poor." Food deficiency alone is rarely the factor productive of extreme malnutrition. Medical care must be provided to eliminate focal infections, correct physical defects and regulate health habits apart from perfunctory arrangement of adequate dietaries.

Journal of Biological Chemistry

Vol. 114, June, 1936

*The effect of ingested cottonseed meal upon the distribution of the constituent fatty acids of goat milk. R. W. Riemenschneider and N. R. Ellis.—p. 441.
*The antirachitic effectiveness of vitamin D from various sources. R. W. Hamon and H. Steenbock.—p. 505.

Vol. 114, July, 1936

*The transfer of inorganic phosphorus across the red blood cell membrane. L. Halpern.—p. 747.

FATTY ACIDS IN MILK. An increase in capric, lauric, myristic, and stearic acids at the expense chiefly of palmitic and oleic acids was caused by the inclusion of cottonseed meal in the ration of goats.

VITAMIN D. The antirachitic activity of certain fish oils such as cod liver oil and halibut liver oil was not increased by irradiation. Irradiated plant oils were less effective, antirachitically, for chicks than irradiated animal fats.

TRANSFER OF INORGANIC PHOSPHORUS. In 29 of the 33 analyses, more inorganic phosphorus was present per unit of water in the serum than in the cells. When carbohydrate metabolism *in vivo* was accelerated in two cases by the injection of glucose and insulin, the concentration of inorganic P decreased in both cells and serum.

Journal of Nutrition

Vol. 11, June, 1936

*The potential alkalinity of honey: Its acid-base value as a food. R. E. Lothrop.—p. 511.

*Pellagra-like syndrome in chicks. S. Ansbacher, G. C. Supplee and R. C. Bender.—p. 529.

*A study of the seasonal variation of vitamin D in normal cow's milk. H. E. Bechtel and C. A. Hoppert.—p. 537.

*The relation between calcium retention and the store of calcium in the body, with particular reference to the determination of calcium requirements. B. W. Fairbanks and H. H. Mitchell.—p. 551.

*A study of the dietary factors concerned in nutritional muscular dystrophy. S. Margulis and H. C. Spencer.—p. 573.

*The vitamin C content of human milk and its variation with diet. I. Selleg and C. G. King.—p. 599.

Vol. 12, July, 1936

*Effect of different forms of iodine on laying hens. V. S. Asmundson, H. J. Almquist and A. A. Klose. —p. 1.

*Vitamin C studies with children of preschool age. G. J. Everson and A. L. Daniels.—p. 15.

*Studies on the relation of diet to goiter. IV. The antigoitrogenic value of some foods. R. E. Remington, E. J. Coulson and H. Levine.—p. 27.

*The effect of the vitamin A (carotene) intake on the vitamin D requirement of rats in the production and cure of rickets. F. S. Tabar, R. A. Dutcher and N. B. Guerrant.—p. 39.

*The comparative rate of absorption of different fats. H. Steenbock, M. H. Irwin and J. Weber.—p. 103.

ALKALINITY OF HONEY. The average alkaline value of representative samples of both light and dark samples of honey was 1.5. While this is low, it compares favorably with certain fruits and vegetables.

PELLAGRA-LIKE SYNDROME IN CHICKS. Concentrates prepared from milk and from rice polishings contain a factor or group of factors which prevents the onset of the pellagra-like syndrome in chicks. Crystalline preparations of vitamin B and of lactoflavin do not prevent the development of the syndrome in chicks. The data indicate that the factor or group of factors which prevents and cures the dermatitis in rats is identical with that which prevents the pellagra-like syndrome in chicks.

VITAMIN D IN MILK. The monthly assay of milk fats from several sources over a period of 2 years shows that milk may vary as much as 900 per cent in antirachitic potency. Highest values were obtained during July, August or September, and lowest usually in February. The exposure of cows to sunlight is the major factor contributing to the vitamin D content of milk. Apparently the cow has little or no opportunity to store vitamin D during lactation under ordinary dairy management conditions.

CALCIUM RETENTION. The calcium content of growing rats is dependent upon the calcium content of the diet and upon the rate of growth. The inverse relation between rate of growth and calcium content of the body is the result of the tendency for rapid growth to be associated with slow calcification of the bones, and the tendency for rapid growth to be associated with high ratios of soft tissue to skeletal tissue. The control of the food intake of experimental animals in calcium nutrition studies is essential to the greatest accuracy.

DIETARY FACTORS IN DYSTROPHY. Prevention of muscle dystrophy as well as cure of the dystrophy already developed was effected by feeding fresh green alfalfa, lettuce and vitamin E, dry alfalfa and vitamin E or whole wheat germ to rabbits on a dystrophic diet. There must be at least two factors involved which are present in fresh green alfalfa or in whole wheat germ.

VITAMIN C OF HUMAN MILK. The average vitamin C content of human milk was found to be 0.055 mgm. per c.c. On a good hospital dietary the average value rose gradually to 0.064 on the tenth day. With orange juice supplements, the vitamin C rose to 0.073 and 0.081 per c.c. on the tenth day. This investigation provides strong evidence against the suggestion that guinea pigs and humans can synthesize adequate quantities of ascorbutic acid during gestation or infancy.

EFFECT OF IODINE ON LAYING HENS. Iodine utilization by laying hens depends upon the source as well as upon the amount of iodine given.

VITAMIN C STUDIES WITH CHILDREN. Urinary excretion of ascorbic acid paralleled the

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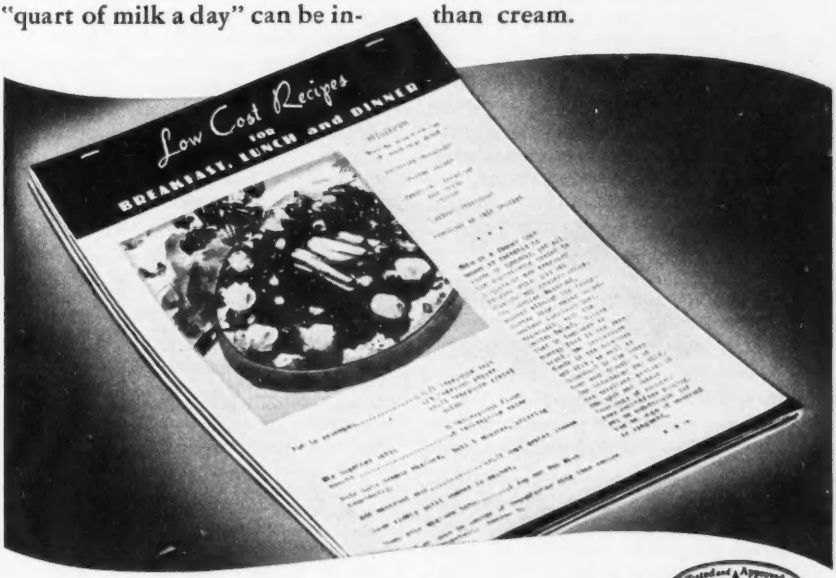

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intake in 3 boys of pre-school age. The highest retentions were obtained with the youngest child, suggesting that there is a greater demand by younger tissue for more vitamin C. Comparable amounts of commercial ascorbic acid and ascorbic acid from foods resulted in similar retentions.

RELATION OF DIET TO GOITER. The antigoitrogenic properties of milk, oysters and haddock are in proportion to their iodine content, and of the same order of magnitude as those of potassium iodide. Irish moss possesses lower antigoitrogenic power than is indicated by its iodine content.

EFFECT OF VITAMIN A ON RICKETS. The manifestations of the interrelationship of vitamins A and D in the etiology of rickets depend upon the past ancestral and nutritional history, the age of the animals and the individual variation among animals of the same age.

RATES OF FAT ABSORPTION. Partially hydrogenated vegetable oils were absorbed as rapidly as lard or corn oil. Butter oil, halibut liver oil, and cod liver oil were absorbed uniformly at a more rapid rate than lard, corn oil, or the partially hydrogenated fats.

Journal of the American Dental Association

Vol. 23, June, 1936

*Diet and preventive dentistry. C. J. Barborka.—p. 977.

Vol. 23, July, 1936

*Significance of calcium, phosphorus and endocrine metabolism in dentistry. C. H. Bloom.—p. 1332.

DIET AND PREVENTIVE DENTISTRY. Economic conditions, ignorance, indifference and unfortunate food preferences are responsible for our defective food habits. Information as to the relation of diet and preventive dentistry points to the fact that an inadequate diet produces nutritional conditions that predispose to dental caries. The interrelationship of environmental and nutritional factors, rather than any one factor, should be emphasized. The patient should be instructed to follow the normal well-balanced diet as outlined in this paper. If any emphasis is to be placed, the patient should be instructed to consume a high mineral, high vitamin and relatively high protein ration that requires vigorous chewing; of low cereal and carbohydrate intake, especially of cane sugar and candy, ending the meal with natural fruits and fruit juices rather than puddings, cakes, pastries and highly sweetened desserts.

CALCIUM, PHOSPHORUS AND ENDOCRINE METABOLISM. The period of pregnancy is of paramount importance to the child. Dicalcium phosphate, together with prophylactic treatment, has prevented oral disease in the expectant mother and has been basically responsible for an absence of caries in the deciduous teeth in children in a large series of cases studied for the past 7 years. In older children, hyperacidity and endocrine dysfunction must be considered as possibilities in faulty calcium and phosphorus metabolism. Caries and malformations can be prevented by an adequate diet of proper alkaline-ash balance and with a bountiful supply of dicalcium phosphate.

Journal of the American Medical Association

Vol. 106, June 6, 1936

*Effect of alcohol on digestion by gastric juice, trypsin and pancreatin. H. Blotner.—1970.

*Effect of carotene and vitamin A on patients with diabetes mellitus: III. The effect of the daily administration of carotene on the blood carotene of normal and diabetic individuals. E. P. Ralli, A. C. Pariente, H. Brandaleone and S. Davidson.—p. 1975.

*The leukopenic index and food allergy. Editorial.—p. 1988.

*Hereditary factor in obesity. Editorial.—p. 1989.

Vol. 106, June 13, 1936

*Carotenemia in diabetes. W. Heymann.—p. 2050.

*Vitamin D milk: The relative value of different varieties of vitamin D milk for intants: A critical interpretive review. P. C. Jeans.—p. 2066.

Vol. 106, June 20, 1936

*Late toxic results, including dermatitis exfoliativa, from "Slim" (dinitrophenol). J. M. Hitch and W. F. Schwartz.—p. 2130.

*Vitamin D milk: The relative value of different varieties of vitamin D milk for infants: A critical interpretive review. P. C. Jeans.—p. 2150.

Vol. 107, July 11, 1936

*Selenium content in wheat. Current comment.—p. 134.

VITAMINS IN CANNED FOODS

III. VITAMIN A

• The most characteristic evidence of severe human vitamin A deficiency, and one which is increasingly rare in this country, is xerophthalmia. Night-blindness, one of the manifestations that usually precedes xerophthalmia, has been recognized as a deficiency disease since the time of Hippocrates who described the disease, and its cure by eating liver. Infrequent reports of this disorder, however, still appear in the American literature. Most if not all of the symptoms accompanying a deficiency of vitamin A are thought to be the result of an impairment of the epithelial tissue (1). In this connection, a new method for the quantitative determination of this vitamin is based on the keratinization of germinal epithelia (2).

That vitamin A exerts an influence on the growth of human infants and children is also generally accepted.

As early as 1919, a relationship between vitamin A in plant foods and plant pigments was postulated. Research since that date has indicated that beta-carotene and some related compounds may be considered as provitamin A (3).

The vitamin A potency of fruits and vegetables is apparently due to their carotene content, since vitamin A as such has never been found in plant tissue. Ingested carotene is believed to be converted into vitamin A by enzyme action in the liver of the animal (4), in which organ the vitamin is stored.

Vitamin A in the form of carotene may be present in yellow, green or red pigmented fruits and vegetables—in the two latter cases, the yellow color of carotene being masked by other pigments present. Color alone, therefore, is not always a reliable index of potential vitamin A potency.

Both vitamin A and carotene are relatively stable to heat but are subject to destruction by oxidation. However, foods of both animal and plant origin, when canned by modern methods, have been found to retain their vitamin A potencies in high degree (5).

In fact, in some instances, practically no loss of vitamin A potency can be detected by formal bio-assays (6).

Commercially canned foods, therefore, may be used with the knowledge that they will contribute to the American dietary amounts of vitamin A entirely consistent with those contained in the raw materials from which they were prepared.

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(1) 1927. J. Exp. Med., *46*, 699
(2) 1935. J. Nutrition, *9*, 735
(3) 1929. Biochem. J., *23*, 803
(4) 1931. J. Biol. Chem., *94*, 185
(5) a. 1933. J. Am. Diet. Assoc., *9*, 295
b. 1931. J. Nutrition, *4*, 267
c. 1935. Am. J. Pub. Health, *25*, 1340
(6) a. 1925. Ind. Eng. Chem., *17*, 69
b. 1926. Ind. Eng. Chem., *18*, 85

This is the sixteenth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.

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EFFECT OF ALCOHOL ON DIGESTION. Alcohol destroys the proteolytic activity of certain gastrointestinal enzymes *in vitro* and *in vivo*. Alcoholic polyneuritis or deficiency disease may be caused by faulty digestion and assimilation of food resulting from the destruction of digestive enzymes by large quantities of alcohol taken over a considerable period of time.

CAROTENE AND VITAMIN IN DIABETES. Following the administration of 1 cc. of carotene, 3 diabetic patients showed a greater increase in the blood carotene than normal subjects. Perhaps in the diabetic patients the ability of the liver to convert carotene to vitamin A is diminished. This may result in an increased concentration of carotene in the liver which interferes with the absorption of carotene from the blood. Blood cholesterol rose along with the carotene in both normal and diabetic subjects.

LEUKOPENIC INDEX AND FOOD ALLERGY. Allergic hypersensitivity to a food is considered to exist if ingestion of the food is followed by a significant fall in the total leucocyte count. A rise in the leucocyte count is said to indicate lack of allergic reaction to a food or normal "digestive leucocytosis." There is some doubt as to the value of the leukopenic index in the diagnosis of food allergy.

HEREDITARY FACTOR IN OBESITY. Of 63 obese women who gave a reliable history of the onset of obesity, pregnancy or a major operative procedure appeared to be the most common factor associated with the initiation of the obese condition. The energy requirement of persons subjected to the same conditions may be modified by a hereditary influence of build.

CAROTENEMIA. The blood serum carotene curves obtained in 10 diabetic children after the administration, by mouth, of carotene in oil were distinctly different from those obtained in 12 nondiabetic children. The carotene content of the blood of diabetic patients failed to show the normal decline and remained elevated or even kept on increasing for from 10 to 14 days after the administration of carotene had been discontinued.

VITAMIN D MILK. An attempt is made to evaluate in relation to the human infant the relative potencies of the different varieties of vitamin D as found in vitamin D milks. Brief consideration is given to the relative values of this vitamin as determined for the experimental animal.

DINITROPHENOL. The case presented shows a multiplicity of severe and persistent reactions, including dermatitis, cataracts and polyneuritis following the ingestion of only 28 grains of dinitrophenol in the form of "Slim" over a 14 day period.

VITAMIN D MILK. Vitamin D of animal source appears to be 1.5 times as potent for human beings as the vitamin D of vegetable source. The amount of vitamin D that barely prevents rickets does not permit the best growth of infants, nor does it allow for desirable retentions of calcium and phosphorus.

SELENIUM IN WHEAT. All wheats contain selenium. Nearly all of this element can be concentrated in the gluten fraction. Commercially purchased wheat varies from 0.1 to 1.9 parts per million in selenium content.

***CAL-C-MALT 'Roche'**

Cal-C-Malt has remarkable tonic properties. It produces a sense of healthful euphoria, diminishes fatigability and improves appetite. There is no compensatory let-down following the invigorating effect of Cal-C-Malt, because Cal-C-Malt is not a stimulant.

Prescribe Cal-C-Malt to favor convalescence from febrile, infectious, or debilitating diseases; to overcome post-operative debility; as a nutrient for pregnant women, and also during the puerperium and the period of lactation; to patients of all ages, adults as well as children, who are undernourished.

In addition to its nutrient tonic properties Cal-C-Malt has important special indications because of its content of effective doses of calcium and vitamin C. Dose: Two teaspoonfuls in milk, t. i. d. *Package: 12-oz. tin.*

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INSTITUTIONAL MANAGEMENT

The American Restaurant Magazine

Vol. 19, June, 1936

*Buying for profit in the progressive restaurant. R.H. Kuennin.—p. 19.
*Create desire with vegetable specialities. H. Ewing.—p. 23.
Dutch apple pie—a true restaurant dessert. M. B. Strause.—p. 29.
Restaurant operating costs. Horwath & Horwath.—p. 31.
Sanitation leads in Texas health sweepstakes.—p. 33.
*Service complaints made by restaurant patrons. H. M. Smith.—p. 35.
Innovations in equipment.—p. 58.

Vol. 19, July, 1936

*When you buy poultry for your restaurant.—p. 22.
Restaurant operating costs. Horwath & Horwath.—p. 24.
Fresh fruit pies with an appeal. M. B. Strause.—p. 26.
*Ice cream—can we afford to make our own? H. C. Siekman.—p. 28.
Muffling the noise evil. J. T. Pheatt.—p. 30.
*Salads for summer. H. Ewing.—p. 31.
*Keep tab on good service. O. Mulvey.—p. 35.

BUYING FOR PROFIT. Buying is the backbone of any business—profit is the result of business ability. Food products represent the greater percentage of all costs—45 to 50%. Intuition, experience, and logical reasoning are essential principles of good buying. A study of raw food and finished product results are necessary. All new food products or changes in food products should first be subject to tests. Draw up specifications for every food item purchased and inspect products before purchasing as well as upon receipt. Do not buy because of price alone. Know all costs per serving and the highest price you can pay for every item of food served, and stay under that price. Plan your menu according to the condition of the market so that the menu and market list may more profitably work together.

VEGETABLE SPECIALTIES. Our tastes are changing from a meat-eating nation to one enjoying a wider variety of greatly improved vegetables and fruits. Potatoes prepared in 66 ways, carrots, turnips, beet greens, fresh lima beans, spinach and tomatoes cooked in new ways, all served in proper combinations with new sauces and new appearances, emphasize the zest in cooking vegetables with skill and imagination.

SERVICE COMPLAINTS. Complaints on restaurant service should always be taken up immediately, whether they seem minor or serious. A recent survey of 4 types of restaurants shows that most complaints were due to neglecting butter, water and bread; slowness of service, employees' quarreling or talking among themselves; untidy, sloppy appearance; mistakes in checks; inattention; too solicitous attention; body odor; or bringing beverage at wrong time. Approximately 60% of the customers interviewed failed to return because of faulty service.

BUYING POULTRY. Chicken prices, in general, are on their seasonal decline from May to the end of the year. To assure a saving of money one must know the seasons, the kind of birds desired for a particular use, the amount of meat per pound of bird, the different grades, and the best and most profitable food-service uses of each. Broilers, fryers, roasters, stewers, capons, hens, ducks, geese, turkeys, all have their seasons when they are most plentiful, therefore cheaper to buy and more profitable to serve. Gives seasonal supplies of fresh poultry and per cent of edible meat to dressed weight data as released by government bureaus.

MAKING ICE CREAM. Modern equipment and simplified methods make it possible for nearly all progressive restaurants to produce their own ice cream, with profit. The manufacture of ice cream is desirable on as low a volume as 20 gallons per day. A restaurant using but 10 gallons can easily boost its daily volume to 20 gallons through the advantages of having its own freezing equipment and through the low priced counter freezers especially designed to meet the needs of food-service establishments. Low cost production is also made possible by the dairy and ice cream companies who have contributed to the market a scientifically prepared ice cream mix, properly pasteurized and hemo-

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The Use of Foods in Health and Disease

By

L. Jean Bogert, Ph.D. and Mame T. Porter, M.S.

The first section of this book is a brief but graphic resumé of the principles of nutrition which govern body needs for an adequate diet—the needs for energy, protein, minerals and vitamins under different circumstances, and how they may best be met. Diet for normal conditions is developed fully in the second edition, with chapters on menu-building, adapting the adult's diet to different individuals under varying living conditions, diet in pregnancy, infant feeding, diet for children and the elderly, cost and racial problems, and how to put family dietaries together. Diet therapy forms the third section and is treated from the modern viewpoint of how and why the normal diet requires adapting in diseased conditions.

The laboratory section is in two parts of 15 lessons each—the first covering cookery of different classes of food (with recipes), the second being devoted to preparation of food for special diets in disease and the working out of dietary projects for such conditions. Tables and illustrations add to the value of the book.

Probable price **$3.50**

THE NORMAL DIET AND HEALTHFUL LIVING

By

W. D. SANSUM, M.D.

R. A. Hare, M.D. and Ruth Bowden, B.S.

Written by the author of "The Normal Diet," which a few years ago sold over 75000 copies, this book is one of the outstanding works on nutrition and health. So beneficial have been the informal talks which Dr. Sansum has had with his many patients at The Sansum Clinic that the request was made that they be put into book form. This book is based on those talks and the material which proved so helpful to hundreds at the Clinic is now available to the many thousands who realize that good health is concurrent with intelligent living. Essential foods and the purposes they serve, the physiology of digestion and absorption, the use of foods within the body, elimination, underweight, overweight and many other subjects are discussed in the light of clinical experience and modern research and *in simple language.*

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By Edith M. Barber **1.75**

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genized, and easily converted into a high quality ice cream.

SUMMER SALADS. It is most important to discover the actual cost of any dish served. The only safe method to determine cost is to weigh every item when it arrives, weigh or measure each item as it goes into a recipe, then determine the cost of the edible part. Salads are among the most profitable of all foods sold for the basic materials at this season require almost no cooking. To increase popularity of salads describe their color and appetite appeal on menu.

DAILY SERVICE CHECK-UP. Cover the following points on daily inspection tours so that the service may be the best possible in all departments: inspect steam table for proper temperature, correct and attractive service procedures; look for any possible harmful condition of any article, either in preparation or in its present state; insist on adoption of standard recipes; check appearance of food served; check preparation of coffee; check to see if proper containers are used; inspect for cleanliness of tray rail, front counter, counter glass; see that checkers are courteous and attentive; relieve checkers personally so as to check store yourself; teach employees neatness; check on clean counter towels, fruits and fruit juices in glass containers, supply of plates and dishes for service and their condition; inspect quality of pies, pastries and salads, and servicing of equipment; check preparation of food; inspect refuse for waste; regulate the listing of prepared food as used and left over; vegetables should be cleaned carefully to avoid unnecessary waste; make hot water supply always available; check on effective sanitation, careful supervision of stock, proper tools for all employees, storage of vegetables, and comfort provided employees.

Buildings and Building Management

Vol. 36, June, 1936

Evolution of the modern lease. D. L. Samuels.—p. 46.
*Modern exterminating methods. J. N. Laferriere.—p. 53.

RAT CONTROL. Use rat poison in a building with solid walls and floors. Raticides must be slow enough to allow rat to leave the building to die. Strychnine is too rapid. Phosphorus is slow enough and fire danger is low when the per cent of phosphorus in the paste is small; but not safe for general use because of deadly poisoning power. White arsenic is slow and causes severe thirst which urges the rat to a watering place. It is dangerous to pets and humans. Dose, 1 part poison to 20 parts food. Thallium sulphate is without odor or taste, and is slow. It is extremely dangerous for humans because of no warning pains and *there is no known antidote.* Commercial preparations are in the form of paste, and should only be used when necessary under proper control. Barium carbonate and red squill are the safest poisons and the most satisfactory. They are mildly toxic to other animals. Dose is 20% of food. See directions for use of silver in Farmer's Bulletin 1533. Baits recommended are fish, meat, cereals, fruits and vegetables. It is best to change bait and poison from time to time. Information on rat-proof construction and repair may be obtained from the Biological Survey, U. S. Dept. of Agriculture, Washington, D. C.

The Horwath Hotel Accountant

Vol. 16, June, 1936

*Food cost accounting for hospitals. P. Simon.—p. 2.
Food and beverage costs. Editorial.—p. 3.
Food control. J. E. McNamara.—p. 7.
Equipment dealers' credit problems. G. O. Podd.—p. 7.

Vol. 16, July, 1936

Food and beverage costs. Editorial.—p. 3.
*Food and beverage control. E. B. Horwath.—p. 4.
*Merchandise turnover. Editorial.—p. 7.

HOSPITAL FOOD COST ACCOUNTING. An address delivered at the convention of the Illinois, Indiana and Wisconsin Dietetic Associations points out the basis of food control in commercial places as contrasted with the hospital, advising that food stocks be held as low as possible; and that there be kept a file of recipes in which ingredient costs have been estimated by test, in order to credit butchers, main and diet kitchen with all transfers. Costs to be adjusted as needed to meet market fluctuations.

A Nutritious Food of
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From Infancy to Old Age

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Is a nutritious digestible diet, especially useful

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We have prepared a booklet for dietitians who have allergy patients and who desire some source of material which can be used by those patients in carrying out their diets. The booklet contains a list of foods allowed and foods prohibited in various diets, recipes for many breads, cakes, tarts, etc., and a list of Chicago Dietetic Foods available. Copies will be sent to dietitians on request.

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You will be interested in these evidences of its unusual nutritive value: Maltex Cereal is an excellent source of *Vitamin B*, averaging 480 Sherman Chase units per hundred grams. The *protein* in Maltex is efficient. Maltex is a good source of *iron* for meeting the body's daily needs, 4.2 milligrams per 100 grams Maltex, dry. Rich in *carbohydrates, easily digested*, Maltex is readily assimilated and thus provides a good source of quick food energy. And Maltex is *economical*, costing less than a penny a portion.

Because of its unusual flavor, Maltex is popular not only as a cereal but for use in muffins, cookies, puddings...a wide variety of dishes. We would be happy to send you free of charge, a recipe book, tested for accuracy, for large quantity servings.

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FOOD CONTROL. The purpose of food control or food cost accounting is to assist the management in obtaining the highest possible gross profit on food sales consistent with the policy of the management as to quality and size of portions. Contains directions for a simplified system of ascertaining the daily cost in total and comparing it with the sales in total. Forms are pictured for the daily records.

MERCHANDISE TURNOVER. Rate of food turnover is lower in Chicago than in New York. Determine monthly rate of food turnover by adding food inventory at end of month to food inventory at beginning of month and divide by 2 to get *average* food inventory. The total cost of food consumed for the month is then divided by the *average* food inventory to get the monthly rate of food turnover.

Hospitals

Vol. 10, July, 1936

*Needs for records and costs surveys in hospital administration. S. M. Gillam.—p. 64.
*Administrative problems of a hospital food department. E. M. Eck.—p. 71.
Food service in state institutions of Minnesota. E. Ferbert.—p. 134.

RECORDS AND SURVEYS. Shows importance of these items for future budget plans and for comparison and control of the large percentage of hospital costs centered in food expenditure. Surveys must be concise and graphic to be of value. Jobs should be evaluated and regulations carried out governing employees. Food specifications, portion costs, edible waste figures are necessary. Emphasis is placed on standardized procedures.

ADMINISTRATIVE PROBLEMS. Discusses variety of organizations of dietary departments in various hospitals and their problems. Names proper organization as first step in management, reference to budget as next consideration, and standards for food and cleanliness of major importance. Illustrates close relationship of purchasing and menu-making. Shows fallacy of comparing per capita costs in different institutions.

Hospital Management

Vol. 41, June, 1936

For mid-summer trays. W. M. Shaw.—p. 40.
April food prices below last year. Grinstead.—p. 45.
Grinstead food price index.—p. 45

Vol 42, July, 1936

*The value of a bonus plan for hospital employees R. Benson.—p. 13.
*An intelligent solution of the personnel problem. S. L. Sims.—p. 20.
The dietitian—her past and her future E. R. Rupert. —p. 35.
Cool ideas for hot days. W. M. Shaw.—p. 36.
Grinstead food price index.—p. 42.

EXTRA PAY. A bonus awarded for better than average accomplishment of a given job pays for itself and promotes greater satisfaction among employees. First used in a hospital kitchen as extra pay for chef if he could improve quality of meals and reduce cost, the experiment was gradually introduced into all departments and found satisfactory.

MODERN METHODS. Treats hiring, working problems, and adequate causes for terminating services of employees. Shows relationship of institution's good will value to personality of the personnel.

Hotel Management

Vol. 29, June, 1936

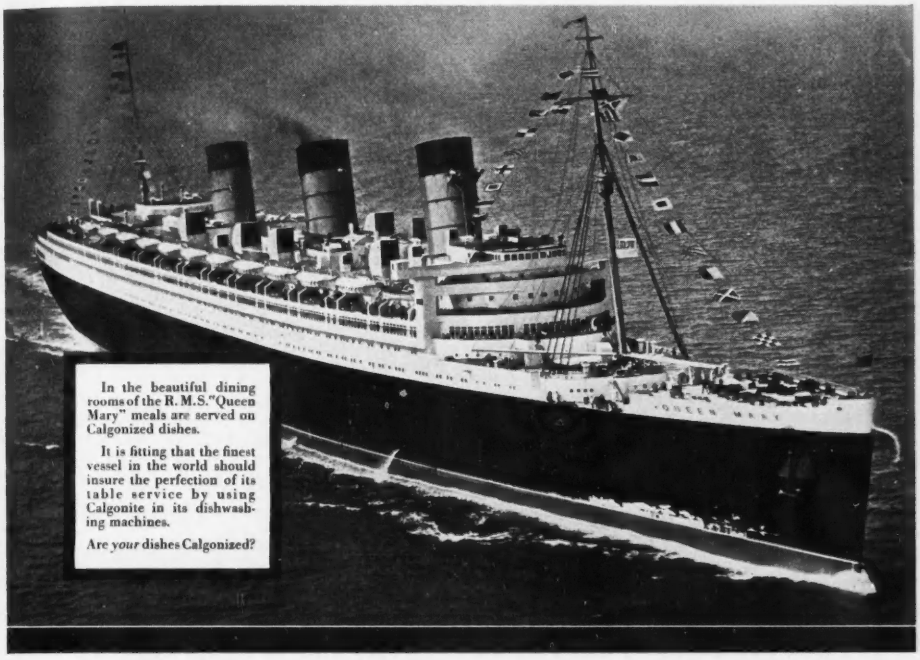
*Management's executive reference guide. No. 2. Editorial.—p. 479.
*Personnel progress charts. Series No. 1. Editorial. —p. 489.

Vol. 30, July, 1936

*What are the educational needs in the hotel business today? J. O. Dahl.—p. 23.
*How to assure dish sanitation. Editorial.—p. 51.

SELECTING EQUIPMENT. The root of institution failure is many times due to unwise equipment investments. Gives a tabulated list to guide the buyer of equipment and the approximate daily volume of business needed to justify investing in each piece of equipment.

PERSONNEL PROGRESS. Here are listed the 10 commandments of the housekeeper, linen room supervisor, maid and houseman. The points given for each person are pertinent


In the beautiful dining rooms of the R. M. S. "Queen Mary" meals are served on Calgonized dishes.
It is fitting that the finest vessel in the world should insure the perfection of its table service by using Calgonite in its dishwashing machines.
Are *your* dishes Calgonized?

Naturally-Calgonite on the Queen Mary!

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The grill on the sun-deck of the superliner

Lounge and cocktail bar, where sparkling glasses count.

and helpful. They might profitably be included as sections in a code of ethics for each type of job.

EMPLOYEE EDUCATION. Instead of urging, as several groups of business men have done, that more college courses be given for institution training, Dahl feels that every effort should be made to make possible education for the more ambitious employees who want to advance in positions. Most executives agree that the need for such trained employees is almost entirely in the food preparation and service departments. There are plenty of people to fill the jobs, but not enough good ones to take them. Often it is found that the salary or living scale does not encourage better people to accept the positions. Suggested reading and demonstration courses that can be given in large and small institutions will follow.

SANITARY DISH WASHING. The essentials of economical dishwashing are a good layout, good equipment and a highly trained personnel who work in a standardized manner. Details various types of machines and materials, together with the results of national research covering dish handling, machine care and washing methods. Answers such questions as: What is the best temperature for water. Is it better to sort glasses, silver and china and wash separately. Where does the breakage occur. Which are the better, men or women dish washers. Should soap be used in dishwashing machines. What is the best method of washing glasses.

The Hotel Monthly

Vol. 44, June, 1936

*Mickelberry's blossomed in a depression garden.—p. 19.
Glass in hotel construction.—p. 27.
Executive housekeepers' code of ethics.—p. 44.
Economical ice cream production. E. H. Handy.—p. 50.
Hotel reorganization.—p. 56.

MICKELBERRY'S LOG CABIN. Since the opening in a residential section of Chicago, in three years it has grown to a seating capacity of 300. Success is due to the quiet homelike atmosphere, plus the absence of liquor service, the personally and excellently trained employees who give the kind of service patrons demand. Southern cooking is featured, a few specialties, and sandwiches of several kinds, salads, luncheons, and dinners ranging from 60¢ to $1.25 with an average check of 62¢.

The Modern Hospital

Vol. 46, June, 1936

*Rebuilding the kitchen—an inside job. J. G. Benson.—p. 90.
*What purchasing really means. F. S. Whitehead.—p. 96.
Recipes by request. N. Ross.—p. 96.
Lowering the food budget. I. Gillum.—p. 98.
July dinner menus for the staff. G. C. Thompson.—p. 100.

Vol. 47, July, 1936

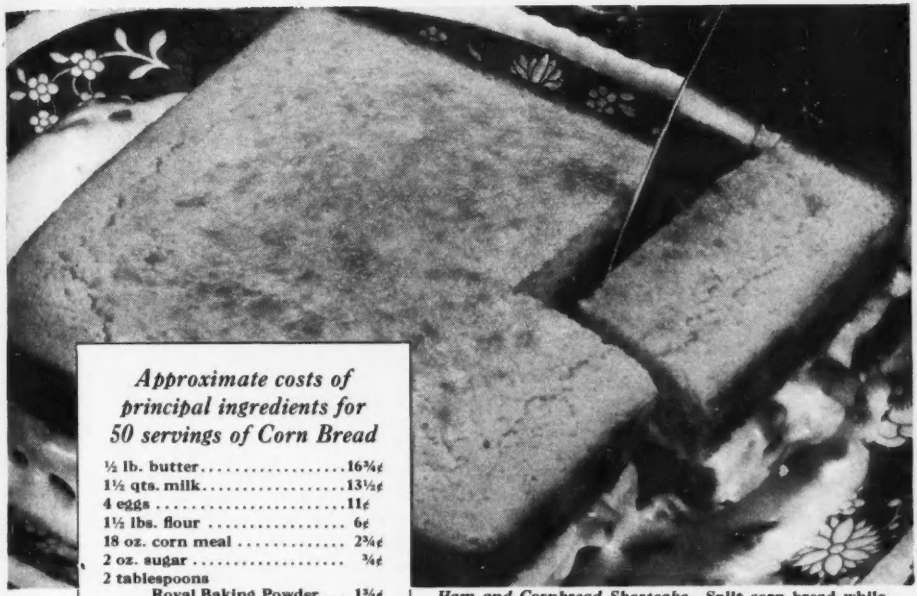
*Food service as a morale builder. W A. Bryan, M.D.—p. 57.
*Accounting for dietary costs. C. A. Togut, C.P.A.—p. 94.
Recipes by request. E. L. Anderson.—p. 96.
August dinner menus for the staff. L. Wilkonson.—p. 100.

LOW COST RECONDITIONING. Methodist Episcopal hospital, Indianapolis, rebuilds its kitchen on a shoestring making cash payments and using all hospital employee labor. Latest type equipment and a modern refrigerating system has resulted in improved food service.

PURCHASING. A review of what an administrative dietitian must know about purchasing.

FOOD AND MORALE. Urges that more time and effort be given to feeding the mental patient. Advises active interest in their cafeteria, trained cooks, and intensive study of the kitchen's needs as a valuable therapeutic asset.

DIETARY ACCOUNTING. Control of dietary costs necessitates: a perpetual inventory control of materials, supplies and foodstuffs; inventories and computation of various rates of depreciation on operating and fixed assets; determination of true operation costs through departmental classification of employees and rental of spaces occupied. Detailed state-



Approximate costs of principal ingredients for 50 servings of Corn Bread

½ lb. butter	16¾¢
1½ qts. milk	13½¢
4 eggs	11¢
1½ lbs. flour	6¢
18 oz. corn meal	2¾¢
2 oz. sugar	¾¢
2 tablespoons Royal Baking Powder	1¾¢
Total	52½¢

Ham and Cornbread Shortcake. **Split corn bread while hot, butter and put together with creamed ham.**

Only 1¾¢ worth of Royal

makes 50 squares of delicious corn bread

Isn't it foolish to bother with doubtful baking powder when you can use Royal at such low cost?

ADD UP the cost of all the ingredients you need to make corn bread for 50 people. Then consider the small amount of baking powder you use in the recipe. 2 tablespoons of Royal—costing you only 1¾¢!

When the best costs such a trifle, it's pretty poor economy to substitute a doubtful baking powder.

Royal contains that superior ingredient, Cream of Tartar. This natural fruit product, made from luscious, juice-heavy grapes, insures a lighter corn bread of finer flavor and easy digestibility.

Remember, when you buy, how *little* Royal costs. Don't risk poor-quality baked foods by using inferior baking powder. Order Royal—and be sure!

ROYAL is the only nationally distributed baking powder that is made with Cream of Tartar, a natural fruit product derived from luscious, juicy-heavy grapes.

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ments of salaries, food and supplies and per capita costs supplement the profit and loss statement.

Personnel Journal

Vol. 15, June, 1936

Industrial relations platform. Editorial.—p. 43.
*Personnel policies and retail profits. O. J. Hicks.—p. 46.
*Emotional factors in accidents. R. B. Hersey.—p. 59.
Employees of the government. H. Feldman.—p. 66.

PERSONNEL AND PROFITS. A description of the rationalization program of a department store in Switzerland with a comparison of the personnel activities with those in America. For example, the wage bill in this country was 18.25% of net sales in contrast to 13% of net sales in Switzerland; net profit there, 3.2%, against a loss here of 1.5%.

ACCIDENTS. Safety is the fourth most important item in workers' industrial environment. Accidents are found to result from low physical and emotional vigor, of various origins. Explains how the emotional factors bringing about accidents can be overcome by either individual or collective approach. Suggests how to deal with maladjusted individuals and why rewards and penalties should be offered.

Restaurant Management

Vol. 38, June, 1936

Smorgasbord served in authentic Swedish setting.—p. 394.
*This is how Fosters do it. Editorial.—p. 407.
How to de-bone the shad.—p. 411.
Profitable salad bowl ideas for 1936.—p. 429.

Vol. 39, July, 1936

*Our girls tell what we sell. D. Swenson.—p. 11.
Before going on duty.—p. 18
How six busy New York cafeterias plan food arrangement.—p. 20.
*Tea room ideas! Editorial.—p. 23.

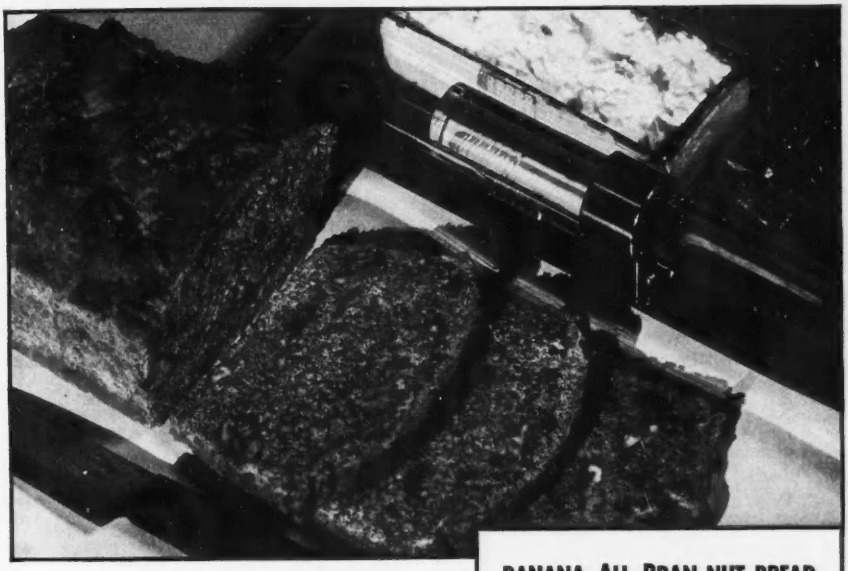
FOSTERS'. A page of food selling specials, a typical day's menu, and illustrations of window display signs used.

WAITRESSES AS SALESGIRLS. Daily meeting of all the waitresses should be considered a necessity in the daily operation of a restaurant. Several ways in which confidence in the food served can be developed in the waitresses to help increase sales are given.

TEA ROOM IDEAS. A survey of tea room assets and liabilities as found in different localities. Emphasizes the importance of the good exterior appearance of an eating-place, a pleasant place for waiting, hospitable hostesses, well-trained waitresses, quiet surroundings, menu assets, etc.

Thousands of people are enjoying this novel recipe

BANANA ALL-BRAN NUT BREAD



DIETITIANS are delighted with this delicious new recipe. It contains Kellogg's ALL-BRAN, which adds wholesome "bulk" to cooked dishes—and helps correct faulty elimination.

ALL-BRAN also supplies vitamin B and contains iron. Two tablespoonfuls daily are usually sufficient. Stubborn cases may require ALL-BRAN oftener.

Tests show that ALL-BRAN is a natural laxative food for normal people. Serve as a cereal or use in cooked dishes.

Try the popular recipe at the right. We will gladly send dietitians, physicians, nurses and others interested a whole set of appetizing ALL-BRAN recipes. Write to *Home Economics Department 309*, Kellogg Company, Battle Creek, Michigan.

BANANA ALL-BRAN NUT BREAD

¼ cup shortening
½ cup sugar
1 egg (well beaten)
1 cup Kellogg's ALL-BRAN
1½ cups flour
2 teaspoons baking powder
½ teaspoon salt
½ teaspoon soda
½ cup chopped nutmeats
1½ cups mashed bananas
2 tablespoons water
1 teaspoon vanilla extract

Cream shortening and sugar well. Add egg and ALL-BRAN. Sift flour with baking powder, salt and soda. Mix nuts with flour and add alternately with mashed bananas to which the water has been added. Stir in vanilla. Pour into greased loaf tin. Let stand 30 minutes and bake in a moderate oven (375° F.) one hour. Let cool before cutting. Yield: 1 loaf (8½ by 4½ in.).

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NEWS NOTES

General Association News. By a vote of the Executive Committee it was decided to publish the annual reports of the American Dietetic Association, to be presented at the Boston meeting, in the November JOURNAL instead of as a supplement to the JOURNAL or as a bulletin.

American Home Economics Association. At the annual meeting in Seattle, July 6–10, the following were among the speakers: Katherine Mitchell, "The Administrative Dietitian"; Dexter M. Keezer, president, Reed College, "Home Economics and National Economics—Some Contrasts and Comparisons"; Professor Paul H. Nystrom, Columbia University, "Consumers' Interest in Current Economic Trends"; Troy Himelman, president, Washington Hotel Association, "What the Hotel Expects of the College Trained Apprentice"; Gustave E. Westlung, Manning Stores, Inc., "Trends in Commercial Food Service"; and Marie Sullivan, Palmer House, Chicago, "Opportunities for Women in the Hotel Field".

American National Red Cross, Washington, D. C. announces its annual roll call from November 11–26, 1936. The proceeds are used to provide funds for ten different services under the Red Cross.

American Association for the Advancement of Science announces the one hundredth meeting to be held in Denver, June 21–27, 1937. Dietitians are invited to attend a worthwhile scientific program, and enjoy entertainment in keeping with the season and local environment.

Canadian Dietetic Association. Officers elected at the annual convention in Montreal are: president, Ruth M. Park, head of Montreal General Hospital's dietetic department; honorary president, Annie L. Laird; honorary vice-president, Mabel Patrick; president-elect, Kathleen C. Burns; and directors, Kay Jeffs, Helen Buik, Alice Stickwood, Grace Sharpe, Alice Pidgeon, Ann Amos Thompson.

Dr. Cyril N. H. Long, director of the George S. Cox Medical Institute, University of Pennsylvania Hospital, Philadelphia, has been appointed professor of physiologic chemistry at Yale University School of Medicine, New Haven, and succeeds the late Professor Mendel as chairman of the laboratory of physiologic chemistry. Dr. Long has done notable work in research on the endocrine glands and on carbohydrate metabolism.

Commonhealth, published by the Massachusetts Department of Public Health, under the sub-title *Nutrition in the Community*, contains articles on the following subjects: The community nutritionist, by Mary Spalding; the training of the nutritionist, by A. F. Blood, Ph.D.; present trends in nutrition, by E. V. McCollum, Ph.D.; the place of the nutritionist in the public health program, by W. G. Smillie, M.D.; the nutritionist with the board of health in a small town, by C. M. Hilliard; the nutrition worker and nurse in a family health program, by B. T. Dimond and Ann Richardson, R. N.; an itinerant nutritionist in a country town, by Dorothy Hager; the contribution of the food clinic to the community, by Frances Stern; the nutritionist on the itinerant clinics, by David Zacks, M.D.; nutrition on the well child conference, by S. M. Coffin, M.D. and F. L. Beinert; a dental nutrition program in a community, by M. M. Brown, R. N. and Dorothea Nicoll; group conferences with expectant mothers, by Charlotte Raymond; a nutrition program in a public welfare organization, by S. E. Sadow; a budget case, by F. G. Dorward; one school's nutrition problem, by Catherine Leamy; publicity for a community nutrition program, by A. P. McKellar; and the nutritionist says it with exhibits, by Dorothea Nicoll.

The Baltimore and Ohio Magazine, published under the auspices of the Baltimore and Ohio Railroad, paid tribute to women by devoting a special issue of its magazine exclusively to them in May. Of interest to dietitians is the account of Pearl Andrews, dietitian, "who gives the 'woman's touch'

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to the meals of the New York, New Haven and Hartford. She travels on the dining cars and has charge of the dining car school of her railroad at Boston, where chefs, waiters, and cooks report to her laboratory for instruction." Miss Andrews was appointed in May, 1934.

The same issue carries an account of Betty Wilmot, dietitian on the Victorian Railways (Australia). "Miss Wilmot comes from Melbourne University. She also studied dietetics under experts at leading hospitals. Her special work, according to the *Railway Gazette* (Overseas Edition), includes the selection and supervision of women on the staff, the management of other branches of the railways' refreshment service, including dining facilities on long distance buffet and restaurant cars. Certain dishes claim to have become company tradition, and the employment of Miss Wilmot is expected to provide a variety in experimentation."

Consumer's Guide for June 15, 1936, contains an interesting article on "Tracking Down the Scurvy-Fighting Vitamin" written in popular style, and announces the publication of a book *Food in the Country Home* published by the editorial staff of *Associated Country Women of the World*, London. The book contains "formulas for products ranging from bottled Norwegian cloudberries to soup made from kangaroos' tails."

Fortune for May, 1936, published an interesting article on "The Wonders of Diet" in which the relation of food to the digestive system is explained in a popular way. Comment is made on the effect of various emotions on the stomach, and the continuous study of diet and nutrition that is being made today, to solve many of the problems of eating.

Recently published booklets of value to the dietitian are: *Facts About Commercially Canned Foods*, distributed by the American Can Company, New York; *The Story of the Canning Industry* (with list of references) and a leaflet *Pitted Red Cherries*, distributed by the National Canners Association, Washington, D. C.; and *Salads on Parade* based on demonstrations given by Marie Casteen, Statler Hotels, and compiled by Ina S. Lindman, distributed by the Fruit Dispatch Company, New York.

An invitation. Lillian B. Storms announces that dietitians are invited to visit Gerber's, Fremont, Michigan. This modern plant is open for the inspection of interested dietitians, and Gerber Products Company will supply information not only on the surrounding resorts, but the auto highways of the state.

Mrs. Minnie Elizabeth White, head of the department of dietetics in the Perkins Institute for the Blind, Watertown, Mass., died suddenly at New York City, July 3, of a heart attack. Mrs. White was 65 years old, and mother of Margaret Bourke-White, well-known commercial photographer of New York. Mrs. White had studied household arts at Columbia from 1898 to 1900. She had kept abreast of latest developments in home economics and institutional management by taking Summer courses and extention work at Columbia University since 1923.

District of Columbia Dietetic Association. The April meeting was held at the Bond Bread Baking Company Building, with Dr. J. G. Coffen, as speaker.

A tea honoring Katherine Mitchell was given at the Dodge Hotel in April by Mary Lindsley and the members of the District of Columbia Dietetic Association.

Rowena Roberts, Sibley Hospital, and Lee Sartel, St. Elizabeth's Hospital, attended several meetings and the banquet of the Maryland State Dietetic Association held in Baltimore.

Mary Philbrick was a guest of the Virginia State Dietetic Association at a meeting held at Old Point Comfort, Virginia.

The May meeting was a joint dinner meeting with the Home Economics Association. Dr. McCollum of Johns Hopkins was the speaker.

An interesting and highly successful year's program with Mildred Parker, president, was concluded with the annual June breakfast

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held at Olney Inn, June 7. Thirty people were present. Among the guests were Dr. Martha Koehne and Lady Eleanor Cole of East Africa. Lady Cole spoke to the group informally on the nutritional deficiency in the diets of two of the native tribes in her section of the country.

New York State Dietetic Association. The outline of the program of the seventh annual convention was presented in a most unusual form. The "menu" was selected by Dr. Estelle Hawley and prepared by Grace Carden and Ursula S. Senn.

At the welcoming luncheon Miss Senn presided, and the following spoke: Grace Carden, president, Myrtle Caudell, head of the department of home economics, Buffalo State Teachers College, guest speaker; and May C. MacDonald, state home economist of the New York State TERA.

Jessie G. Cole, chairman of the Community Education Section, presided at the meeting at which the following were speakers: Mary I. Barber; Margaret Fotheringham; Mabel Stimpson; Vivian Drenckha; Lorna Barber, and Barbara VanHuelen. At the Diet Therapy Section, presided over by Genevieve S. Moyer, the speakers were: Dr. Estelle Hawley, Dr. Samuel W. Clausen, chief, pediatric service, University of Rochester Medical School, and Dr. Charles B. F. Gibbs, Strong Memorial Hospital. Dr. Mary deGarmo Bryan spoke at the meeting of the hospital association and declared that the superintendents of hospitals will have a more successful dietary department when well trained dietitians are in complete charge, and when more than half-way workable equipment is provided.

Dorothy DeHart presided at the meeting of the Administration Section when the following addressed the group: Dr. Frederick MacCurdy, Vanderbilt Clinic, Presbyterian Hospital; S. Margaret Gillam, New York Hospital, Marie Casteen, and Dorothy A. Pruitt, Rockland State Hospital.

At the Professional Education Section meeting presided over by Dr. Mary deGarmo Bryan, Dr. Istar A. Haupt, associate examiner of New York State Civil Service Commission, requested that a committee be appointed to work with Dr. Haupt on qualifications for dietitians in charge of dietary departments in state hospitals. Adelle H. Land spoke on teaching and Katherine Mitchell on "Do You Know Your Constitution?" Miss Mitchell also told of the work of the national Association at the dinner presided over by Grace Carden.

There was a registration of 120 and the following officers were elected: president, Emma Feeney; vice-president, Minna G. Roese; secretary, Grace M. Schenk; treasurer, Esther H. Rhodes; and publicity chairman, Minna G. Roese.

Rhode Island Dietetic Association held eight meetings during the year, of which two were executive.

Two members have left the association. Miss Israel of Miriam Hospital was married and has moved out of the state. Miss Simonini of the F.E.R.A. has accepted a position in another state.

A letter was sent to Charles Risk, state representative at Washington, voicing the association's attitude on one item of the Food and Drug Bill. It was recommended that Mr. Risk vote in favor of the retention of enforcement of advertising provision, under the Food and Drug Administration, rather than under the Federal Trade Commission.

The April meeting was held at the W. P. A. Training Cottage. Mrs. Helen L. Wightman, of the Vocational Training School for Unemployed Girls, and Myrtle Johnson, of the Nursery School of the Nutrition Department, gave reports on their work.

Chapin Hospital entertained the association in May. The speaker was Ruth L. White of the Forsyth Dental Clinic, Boston.

For the annual meeting in June, members were invited to Butler Hospital for a picnic supper. Miss Rhodes, the vice-president, called the meeting to order in the absence of the president. The secretary's and the treasurer's reports were read and accepted and placed on file. Eleanor Wells, chairman of the nominating committee, read the list of officers for the coming year as follows: presi-

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dent, Elsie Ewertz, Rhode Island Hospital; vice-president, Daisy MacQuarrie, Butler Hospital; secretary, Esther Spratt, Rhode Island Hospital; program chairman, Florence Haynes, Family Welfare Society; and membership chairman, Helen Taylor, Jane Brown Hospital.

Texas State Dietetic Association. The Texas Centennial celebration has attracted most of the Texas dietitians who are visiting this wonderful exposition in Dallas.

Mary E. Smith, chief dietitian, Memorial Hospital, Houston, was appointed historian for the coming year.

Mrs. Doris C. Robinson of Bay City and recently of New York City will relieve during the vacations of the dietitians of Memorial Hospital, Houston.

Ruth J. Cooper, Tracy-Locke-Dawson, Inc., Dallas, has recently published some interesting and beautifully illustrated recipe books.

Azalete R. Little, King's Daughters Hospital, Temple, is a new member of the American Dietetic Association. Nell Wickliffe, Station Hospital, San Antonio, and Mrs. Helen Rabe Sloan, Nix Hospital, San Antonio, have recently been re-instated as active members of the American Dietetic Association. The Texas State Dietetic Association now has 57 active and 8 associate members.

Utah Dietetic Association. At the May meeting held at the Dr. Groves' Latter Day Saint Hospital in Salt Lake City, the following officers, all of Salt Lake City, were elected for the coming year: president, Evelyn Bushey, Latter Day Saints' Hospital; vice-president, Georgia Crane, Latter Day Saints' Hospital; secretary, Inez Smith, Salt Lake General Hospital; and treasurer, Frances Livingston, nutrition consultant of Salt Lake County Department of Public Welfare.

The June meeting was held in City Creek Canyon, outside of Salt Lake City. Twenty members enjoyed a steak fry by the side of one of Salt Lake Valley's most beautiful mountain streams.

The following students have been graduated from the Dr. Groves' Latter Day Saints' Training School for Dietitians in March of this year, and have been placed in the following positions: Helen Brand, assistant dietitian, Presbyterian Hospital, Denver; Labora Smith, Price City Hospital, Price, Utah; Thelma Young, Redlands Community Hospital, Redlands, California; and Maxine Merrich, St. Mark's Hospital, Salt Lake City.

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WHO'S WHO IN THIS ISSUE

Jane M. Porter joined the staff of the Women's City Club of Detroit four years ago; for two years she was assistant in the restaurant and for the past two years has been in charge of the department. The club operates on a hotel basis with forty bedrooms, and serves three meals a day, seven days a week. Miss Porter was graduated in 1930 from Western Reserve University, Cleveland, with a B.S. degree based on a major in foods and a minor in chemistry. Her student dietitian training was completed at Lakeside Hospital, and the Babies', Children's and Maternity Hospitals, Cleveland. At the University, she was subsequently assistant to the college dining room manager, and at University Hospitals was assistant dietitian at the Nurses' Dormitory. Later she was affiliated with Bertha Damon who operated a tea room and pastry shop in Cleveland. Miss Porter's interest in catering service led to the opening of the now successful Club Food Shop, Detroit.

Herbert D. Mendenhall, consulting engineer for the Florida State College for Women, Tallahassee, is a member of the American Society of Consulting Engineers.

Isabel M. Stewart, professor of Nursing Education, Teachers College, Columbia University, is chairman of the Curriculum Committee of the National League of Nursing Education and identified with a number of other committees and boards concerned with the education of the nurse. The League of Professional and Business Women honored Miss Stewart on March 18, 1936 by including her name in this year's list of twenty-five women of achievement.

Ann Hains is a graduate of St. Mary's College, Notre Dame, Indiana, receiving a B.S. degree in 1931. Miss Hains was a student dietitian under Sister Victor at St. Mary's Hospital, Rochester, and from 1932 to 1935 remained on the staff of the hospital, at which time she wrote the paper appearing in this JOURNAL. Since August of last year Miss Hains has been doing administrative and teaching work at Notre Dame and is now taking a course in institution management under Margaret Gillam at New York Hospital. She also plans to complete work for her master's degree at Columbia University.

Flora Hanning was a contributor to the November, 1933 issue of the JOURNAL.